

User Manual ROTOBED®Home





Content

1.	Introduction and general information	3
2.	Before commissioning	4
2.1	Reception	4
2.2	Placement	4
3.	Commissioning	5
3.1	Mounting of mattress	5
3.2	Mounting of side rails	5
3.3	Remote control	6
3.4	Operating RotoBed®Home	7
3.5	Important documents and video material	8
4.	Intended use	9
4.1	Purposes and standards	9
4.2	Maximum load	9
5 .	Security	9
5.1	Security during use	9
5.2	General instructions	10
5.3	Children	10
5.4	Use of accessories	10
5.5	Lifting pole	10
5.6	Mattresses	11
5.7	Electricity safety	11
6.	Cleaning	11
6.1	Manual cleaning	11
6.2	Cleaning in washing system	11
7 .	Service and maintainance	12
8.	Warranty	12
9.	Life expectancy	13
10.	Disposal	13
11.	Technical info	14
12.	Troubleshooting	14
13.	Reset motors	16
14.	Guideline for lubrification	17
15.	Accessories	19
16.	Type plate& symbols	21
17.	EC Declaration of comformity	22



1. Introduction and general information

Thank you for choosing to buy a RotoBed®Home.

RotoBed® is a high quality product that will serve you as an aid for many years to come with proper use and maintenance.

To get the most out of your bed, please read this manual carefully. The same applies to any other persons, such as carers or relatives who are going to operate the bed.

It is important that anyone who is to service or clean the RotoBed®Home is aware of the safety section. This is especially true if at any time there are children in the immediate vicinity of the bed.

Please note the warranty section, including what to comply with in order to maintain the warranty.

This manual may contain inaccuracies or typographical errors. The information contained herein is regularly updated, and changes to product care and others may be enrolled in later editions. Changes and improvements without notice may occur. If you have any questions, you are always welcome to contact us.

Please contact us if your needs change after the purchase of the bed. RotoBed® has a wide range of accessories that can help make the RotoBed®Home an even better tool for you.

We hope that your new RotoBed®Home will give you increased comfort, mobility and quality of life.

1.1 | What RotoBed® Home can do for you

People who are struggling to get into or out of the bed themselves can, with a RotoBed®Home, become selfreliant and manage entry and exit without physical effort.

By holding down a single key on the remote control, the bed is raised to comfort position and rotated perpendicular to the room. This facilitates both exit and potential transition to a wheel-chair or stand up hoist. The movement takes less than a minute.

RotoBed®Home helps the user maintain mobility and supports the user's standing function. The bed makes the user more selfreliant and reduces the trouble and pain of getting up and going to bed.

The patient surface is 4-sectioned, and entry and exit is possible on both sides of the bed.

In addition to the rotary function, RotoBed®Home features electrical adjustment of backrest and leg parts.



2. Before commissioning

2.1. | Reception

- Damage that has occurred during transport must be notified immediately upon delivery.
- Check that all ordered parts are free of defects at reception. The bed must not be used if there are errors or defects that may cause risks to people.
- Contact the manufacturer or local representative if the product is damaged, if it has
 other visible signs of defects or if the bed is not working.

2.2 | Placement

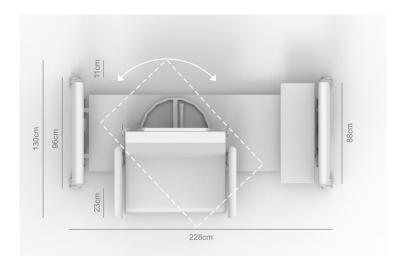


Illustration of the bed's dimensions and space requirements.

Be aware that it is possible to individually store the inclination of the backrest. The chosen inclination will affect the required distance to the wall during rotation.

Standard delivery setting is a 45° inclination and a distance to the wall of at least 11 cm. Inclination can be stored at any point between 35° and 55°.

- Select the correct location for the bed:
- Provide sufficient distance to wall / furniture, taking into account the movements of the bed.
- Place the bed near a wall outlet to prevent free cables / fall risk.



3. Commissioning

3.1 | Mounting of the mattress

RotoBed®Home comes with a mattress consisting of a main part and a foot part.

The main mattress has 5 buttons on the back.

- First place the three lower buttons in the grooves at the bottom of the bed.
- Slide the mattress towards the foot end.
- Now press the two buttons in the centre of the mattress into the corresponding holes in the middle of the bed.
- Similarly, the foot mattress has two buttons, which fit into the two round holes in the bed.
- The mattress is best protected by using the semi-impermeable cover in stretchable incontinence foil.

3.2 | Mounting of side rails

RotoBed®Home can be delivered with side rails made of metal or oak veneer. Regardless of material the side rails are mounted and removed in the same way:







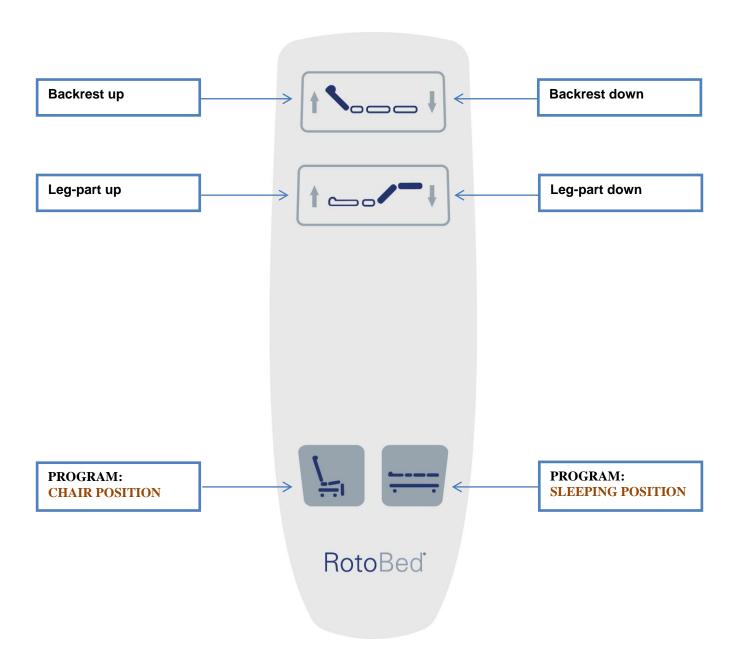
Press the small fitting underneath while lifting the bed rail.

The side rails can simply be put back into place and will automatically lock.

NB! The side rails should only be mounted or not mounted. Do not leave them upright and loose. This may cause squeeze risk and damage to the bed during rotation.



3.3 | Remote control



To operate the bed, hold down a key. When you release the key, the movement stops. Only press two keys simultaneously when you want to reprogram the bed.

RotoBed®Home can rotate either left or right depending on your preference. Therefore, the remote control can be connected to both the right and left sides of the bed. When the remote control is not in use, you can place it on the side rail.



3.4 | Operating RotoBed®Home







Before use:

Hold down the **Chair Position** key until the bed stops in exit position.

As standard, RotoBed®Home is set to run to an oblique exit position to facilitate transfer to wheelchair or walker. If you wish a perpendicular exit, do as follows with the bed still inside the bed frame:

Hold the program keys **Chair Position** and **Sleeping Position** for 5 seconds until a beep sounds.

From now on, the bed will automatically move to a perpendicular exit. In order to go back to angled exit, repeat the procedure.

NB:

For maximum comfort during rotation, see Individual storing of backrest inclination, next page.







Entry:

Get seated as close to the backrest as possible for the best comfort. Hold down the **Sleeping Position** key until the bed is rotated and horizontal. Now the RotoBed®Home works like an normal bed with adjustable leg-part and backrest.







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Exit:

Hold down the **Chair Position** key until the bed stops in an exit position. To facilitate exit you can, by means of the remote control, move the backrest the last bit forward.

Individual storing of backrest inclination:

Move the backrest to desired inclination during entry and exit. Press both backrest keys simultaneously for 10 seconds until a beep sounds. In the future this will be the inclination when using Chair Position and Sleeping Position.

Standard delivery inclination is 45°. Inclination can be stored at any point between 35° and 55°.

3.5 | Important documents and video material

The following documents have been prepared for this bed:



User Manual

This instruction manual describes all aspects of the bed.

This applies to both safety and cleaning, commissioning and instructions in relation to the location and use of the bed. General information about service, warranty and maintenance can also be found in the User Manual.



Quick-guide

The Quick Guide is a brief, focused instruction on how to help the user enter and exit the bed using the remote control. The guide is intended for users, staff and relatives. It is recommended that the guide is available at the bed for daily use.



Video material

Video instructions for service and assembly can be found on www.rotobed.com/downloads



4. Intended use

4.1 | Purposes and standards

RotoBed®Home is designed to help users with pain/physical difficulties. It facilitates entry and exit for the user and reduces the workload for relatives in connection with transfers.

RotoBed®Home is developed for users in private homes.

RotoBed®Home is CE-Marked according to the Machinery Directive (EU) 2006/42/EF.

4.2 Maximum load



RotoBed®Home may be used only respecting the following limitations::



5. Security

5.1 | Security during use



- Always read the user manual before use and follow the instructions.
- RotoBed®Home must not be used rotating anything other than the user to which the bed is fitted.
- The bed should only be used by a user who has sufficient mobility and cognitive understanding to utilize the bed's functions and avoid accidents.
- The rotary function must not be used with more than one person in the bed.
- When the bed's functions are operated, the moving parts of the rotary bed constitute a squeezing hazard.
- When adjusting the bed's positions, all objects and persons, especially children, must be kept clear of the moving parts of the bed.
- The entire body of the user must be within the patient surface.
- Be aware that the bedding does not get caught in the moving parts of the bed while adjusting the bed's positions.
- The connecting cable must be free of the rotation mechanism and capable of moving while adjusting the bed positions.



5.2 | General instructions



- The RotoBed®Home engines meet all relevant standards and norms. Electrically
 adjustable beds use extremely powerful engines. To prevent overload or damage to the
 bed, it is important to follow the regulations when operating the engines.
- The remote control must always be available and located correctly. Keep in mind that the
 remote control does not clamp between the moving parts of the bed, as this may cause the
 keys to be activated without intention.

5.3 | Children



RotoBed® wishes to draw users attention to the potential dangers of children who play in and around the bed. Children are naturally curious. They find beds with moving parts exciting, but due to the powerful engines, the bed is absolutely not suitable as a toy. In case of improper use there is a risk of getting squeezed. The following must therefore be emphasized:

- Do not let children play with the bed and its remote control / functions.
- Inform visitors and persons responsible for children about the potential safety risk.
- Children who stay close to the bed must be guided and not left alone.
- Place the remote control away from curious eyes and hands.
- Disconnect any power supply if deemed appropriate.

5.4 | Use of accessories



- It is the responsibility of the user to ensure that bed and accessories are assembled and used according to the manufacturer's instructions.
- Do not use third party accessories, side rails or mattresses without the manufacturer's approval.
 Violation of this may pose a safety hazard.

5.5 | Lifting pole



RotoBed®Home can be delivered with a lifting pole to be mounted on the right or left side of the bed's headend. The lifting pole's grip is provided with a roller belt so that the height can be adjusted to the individual user.

- Maximum load of lifting pole: 75 kg.
- Do not use the lifting pole outside the bed frame as this may constitute a rollover risk.
- Before use and for continuous maintenance, check the lifting pole for damage to the roller belt's stitches and cracks in the grip.



5.6 | Mattresses



RotoBed®Home can be delivered with different types of quality foam mattresses with pressure ulcer prevention in stages 2 and 3, as well as a high protection mattress with documented pressure ulcer prevention and treatment in all 4 stages.

The mattress will consist of two parts; a main part and a foot part.

 Remember to attach the mattress to the bed as per the regulations (see assembly instructions page 5). Failure to fasten can cause the mattress to not follow the bed's movements or slide off the bed. This will pose a security risk to the user.

5.7 | Electricity safety



- The electrical equipment of the bed must not be changed.
- Regularly check the power cable for damage. In case of obvious damage, turn off the power supply and seek professional advice.
- Before use and service / maintenance, check all electrical wiring, power supply and connection for cracks or other visible damage.

6. Cleaning

6.1 | Manual cleaning

Metal parts

- All surfaces can be cleaned with a soft damp cloth and mild detergent.
- Wipe with a cloth moistened with clean water and dry again.
- Make sure all the bed's parts are dry before putting the mattress back onto the bed.

Wooden parts

- Use cleaning and care products designed for wood furniture.
- Make sure all the bed's parts are dry before putting the mattress back onto the bed.

6.2 | Cleaning in washing system

RotoBed®Home is classified IPX6W and can be cleaned in a washing system. When cleaning in washing systems, follow the RotoBed® washing instructions. You will find these at www.rotobed.com under downloads.



7. Service and maintenance

RotoBed®Home does not require much maintenance, but it will minimize any problems if you keep the bed clean and follow the instructions for use, lubrification and cleaning.

1. Control of electrical parts

- Check all power cables for damage.
- Check the power plug condition.
- Check the remote control functions.

2. Control of mechanical parts

- Check all frame components for wear, damage and corrosion.
- Check that backrest and leg parts are running smoothly and at full power using the remote control.
- Check that the rotary engine is running smoothly and for full power.
- Check that all joints (nuts, screws, etc.) are tightened.
- Check the lifting pole (if mounted).
- Apply grease to all moving parts and remove excess grease.

4. Control of side rails

- Check the function of the side rails
- Check the side rail grips for damage.

8. Warranty

RotoBed®Home is a high quality product which is to ensure many years of trouble-free use. RotoBed offers a three-year warranty provided that the bed is purchased from new and that the instructions in this manual are followed. This warranty covers spare parts and repair of defects in the product during this period, unless otherwise stated in the sales agreement.

The warranty covers problems due to defects in the design or production of the bed - however, only if the bed has been used in accordance with these instructions. Faults and defects that arise during the warranty period must be reported immediately to the dealer or manufacturer, who will determine if the bed is to be repaired, replaced or discarded.

Incorrect use of the bed, abuse and accidental damage is not covered by the warranty, and in that case there will be a fee for the repair. A minor breach of warranty will not affect the continuation of the warranty. Under certain circumstances, actions that cause fundamental damage to the bed will lead to invalidation of the warranty for the rest of the warranty period.

Events that are not covered by the warranty include:

- Damage caused by overload or improper use of the bed.
- Damage caused by washing or cleaning where instructions are not followed.
- Damage caused by missing or improper maintenance.
- Accidental damage to the remote control, for example, if it is dropped in liquid or run over by a wheelchair.



- Damage to cables, for example if they are caught in the moving parts of the bed.
- Damage to mechanical or electrical parts under the bed due to incorrect use of lifting or hoisting equipment.
- Damage to mattress and upholstery for any reason.
- Damage to the wall or adjoining furniture due to improper placement of the bed.
- Damage to the electrical outlet for any reason.
- Damage caused by electrical parts being opened or used improperly.

The bed is designed to carry a defined maximum weight. Maximum user weight and label load must not be exceeded. The above are examples, and the list is therefore not readable as all-encompassing.

Wood is a natural product and undergoes a natural aging process. Over time, environmental impacts such as humidity, heat and UV radiation will cause changes in the surface of the wood. Changes caused by natural aging are not covered by the warranty.

9. Life expectancy

RotoBed® Home has an expected lifetime of minimum 10 years depending on maintenance / treatment.

The use of beds that are not in good quality- and safety condition can lead to dangerous situations.

Use, cleaning, maintenance and service according to the manufacturer's regulations will affect the lifetime of the bed. It will also extend the lifetime when wear parts are replaced as required and according to the manufacturer's instructions.

10. Disposal

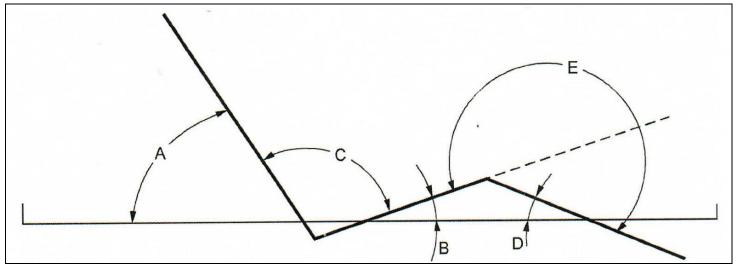
RotoBed® focuses on recycling and environmentally sound production. Disposal of beds or bed parts must take into account the environment and comply with national legislation. Local authorities can provide information on how and where used equipment can be delivered.

The bed can be divided into waste fractions metal, plastic, electronics and cables. When disposing the bed can be divided into the following material groups:

PRODUCT	MATERIAL	HANDLING
	Electronics, wires and cables	Electronics waste
	Metal	Recycling
RotoBed®Home	Laminate	Burnable
	Plastic	Burnable
	Tree	Burnable
	Textiles	Burnable
	Plastic	Burnable
Mattress	Cold foam	Burnable
	Textile	Burnable
Upholstery for side rails	Textile	Burnable
	Metal	Recykling
Lifting Pole	Plastic	Burnable



11. Technical info



 $A = 0-86^{\circ} I B = 0-20^{\circ} I C = 0-74^{\circ} I D = 0-16,7^{\circ}$

WEIGHT AND LOAD	
User weight max	190 kg
Accessories max	35 kg
Headboard	22 kg
Foootboard	20 kg
Frame	104 kg
Total weight	146 kg

PATIENT SURFACE (4-sectioned with electric setting)			
Length (mattress)		205-225 cm	
Width (mattress)		85/100 cm	
Height of patient surface, min/max	From floor to patient surface	32-52 cm	

BED (outer measure)		
Length	228 cm	
Width	94 cm	
Free space over floor	≥ 15 cm	



12. Troubleshooting

	SYMPTOM	POSSIBLE CAUSE	HANDLING	
1	The bed does not respond to the remote control.	The remote control is not connected to the bed.	Plug the remote control into the control box.	
2		Is defect	Replace remote control and associated cable.	
	The remote is connected, but the bed does not respond.	The engine of the bed is not adjusted and does not work for that reason.	Check that all sockets are properly installed and that the power is connected to the bed. Use the remote control reset function, see "Reset motors".	
		May occur after service or if engine plug has been removed.	Use the remote control reset function, see "Reset motors".	
3		Cable is plugged into the wrong control box	Plug cable in the correct control box	
	Only some of the electrical features respond when	Motor is damaged	Change defect part	
		Control or remote control is defect	Change defect part	
		Control box is defect	Change defect part	
4		Motor is damaged	Change defect part	
	The bed says a strange sound when set with the remote control.	Wires or parts are clamped	If the cord or bed parts are damaged, replace the part. Send bed for service.	
		The bed needs lubiration	Follow the guide page 19	
5	The motors often have to be reset.	Check that all cables are well connected	Check if any of the connected devices such as actuators, remote controls,	
		Control box is defect	cables, etc. are defect.	
6	The bed smells warm or runs irregularly.	The bed is overloaded.	Send the bed for service.	



13. Reset of motors

If the bed is not working as expected, it can be reset via the remote control.



NB! In the event of disconnection of the motor cable, it may be necessary to reset the system.

NB! If the bed is equipped with bed rails, these must be removed before resetting.



- Simultaneously press both sides of the leg-part key on the remote control (leg-part up + leg-part down)
- Keep pressing the keys until:
 - The bed is inside the frame
 - The backrest is in the lowest possible position
- This can take up to a minute and a half. The process is complete when four small beeps are heard.

If the need for reset is repeated, the bed must be serviced.



14. Guideline for lubricating the bed

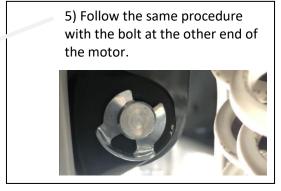
Annual lubrification is recommended. Instruction:

Move the backrest to an upright position. Make sure to fix it before you start removing bolts, otherwise it will fall down.











All the moving parts (A) where the frame is connected must be sprayed with Teflon. **Very important**: do not tighten the nuts/bolt (A) too much; they must be a little bit loose. Repeat the procedure on the other side of the bed.

Raise the leg-part to a horizontal position, find the point where the bolt at the foot-motor is loose.







Now follow the same procedure as for lubricating the backrest:

- 1) Remove the upper clips. 2) Remove the bolt. 3) Apply grease. 4) Reinsert bolt and clips.
- 5) Follow the same procedure with the bolt at the other end of the motor.



Gas spring: Remove the bolt and nuts. Apply grease to the bolt and reinsert it. Follow the same procedure at the other end of the gas spring – and on the gas spring on the other side. Very important: do not tighten the outer nut (B) too much; it must still be a little bit loose.



Spray some Teflon into the U-Profile (under the leg-part) on both sides.

Use following grease or similar type: OKS 470 - White Universal High-Performance Grease

Description: Universal grease with white solid lubricants and NSF H2 approval - Lubrication of normal-load friction, rolling and pivoting bearings - Lubrication of moving parts at fine-mechanical devices - Waterproof.

Use following Teflon Spray or similar type: Würth HHS 2000 Lubricating Oil 500ml (spray)

Description: Highpressure resistant- Extraordinarily tear-resistant lubricating film with outstanding noise and vibration damping properties - High creep capacity - Excellent lubricating properties with close tolerances - Reliably protects against corrosion - Active adhesive effective. No throwing off of the lubricant with turning and rotating parts - Splash and saltwater-resistant, withstands weak acids and alkaline solutions - Contains no silicone, resin or acid.



15. Accessories

RotoBed® offers a vast variety of accessories for RotoBed®Home. A large part of these high qulity accessories are specially designed for RotoBed® to ease everyday life even more for the user.

ACCESSORIES FOR ROTOBED® HOME	
RotoBed®ROHO® DRY FLOTATION	2-layer mattress with proven efficacy in the prevention and treatment of pressure ulcers in all four stages. Optimal prevention and healing conditions for users at high risk of pressure ulcers. Maximum user weight 190 kg.
RotoBed®SafeSleep Mattress	4-layer quality mattress. Prevention and treatment of pressure ulcers in stages 1-3.Recommended user weight: 40 – 120 kg.
RotoBed®ErgoSleep Mattress	2-layer quality mattress for all-round use and for prevention and treatment of pressure ulcers in stages 1-2. Recommended user weight: 60 – 140 kg.
RotoBed®BariaSleep Mattress	4-layer quality mattress with proven efficacy in the prevention and treatment of pressure ulcers in stages 1-3. Recommended user weight: 120 – 190 kg.
RotoBed®RotoSlide	A slide sheet designed for people with difficulty turning over in bed. Can be used in combination with RotoBed®RotoSlide 2way or RotoBed®RotoSlide 4way, for instance in connection with transfers.
RotoBed®RotoSlide 2-way	Sliding sheet facilitating sideways transfers in the bed. Slides in two directions. Use in combination with RotoSlide slide sheet.
RotoBed®RotoTurn	Sliding and turning system with integrated locking function. Specially adapted to RotoBed® care beds.
RotoBed®Pillow	Pillow made of thermos-elastic foam.
Kotobed@Tillow	Width 80 cm, covers the entire width of the bed.
Pillowcase for RotoBed®Pillow.	Attachable at backrest. Made of soft, stretchable cotton, washable at 60°c.
RotoBed®Sheet	Set consisting of sheet for both main mattress and foot part. Soft stretchable cotton, washable at 60°c.
RotoBed®Protection Cover	Mattress cover made of soft, stretchable foil. Semi-impermable, washable at 60°c.



RotoBed® Lifting pole	Including handle with seat belt.
Kotobed® Litting pole	To be placed in the bed's build in holders, in either the right or the left side of the bed.
RotoBed®Upholstery	Upholstery, covers both side rails. Material: Quality fabric from Danish Kvadrat, made of 51 % recycled plastic. Washable at 60°c.
RotoBed®LED Lamp	To be placed in the bed's build in holders, in either the right or the left side of the bed.
RotoBed®Bedside Table Design by Hans Sandgren Jakobsen	Round table in oak veneer, diameter 30cm. Height adjustable and swivelling.
RotoBed®Underbed Light	Two soft spotlights will turn on whenever the RotoBed® is rotated towards exit position. When the bed is rotated back, lights will go out. Underbed Light is mounted on the bed.
RotoBed®Light Package	When RotoBed®Home rotates, two soft spotlights under the bed will turn on – as well as any lamp you choose. When the bed is rotated back, lights go out. The external lamp is connected to the system by a plug.
RotoBed®Trolley	Bed carrier for vertical transport/storage of bed.
RotoBed®RotoLift®	Elevates RotoBed® to vertical position with no physical exertion. To be used in combination with RotoBed® Trolley. CE-marked,approved by the Danish Technological Institute.
Battery back-up	Lithium Battery - Covers approx. 10 x cycle without power.



16. Type plate and symbols

RotoBed, Storegade 44 DK-6640 Lunderskov Phone +45 7550 5025	C € marked Machinery Directive (EU) 2006/42 EF	
SN 2020100500-0001	<u>○</u> = 190 kg.	
	IPX6W Int: <10%, max. 2 min. ON / 18 min. OFF I in max. 2A, 100/240VAC, 50/60 Hz	

CE	CE approval Machiney Directive (EU) 2006/42 EF	(3)	User Manual
SN	Serial number	\triangle	Be aware, take care. See accompanying documentation.
	Manufacturer		Maximum user weight
	Double isolation, no earth wire needed.	<u></u>	Rated load
	For indoor use		Manufacturing Date





EC Declaration of Conformity (DoC)

CE-marking according to Machinery Directive (EU) 2006/42/EF

RotoBed hereby declares that EC declaration of conformity is issued solely under the responsibility of the manufacturer.

Manufacturer:

RotoBed ApS Storegade 44 DK-6640 Lunderskov Tel.: +45 7550 5025 e-mail: info@rotobed.com www.rotobed.com

Hereby declares that the product line:

RotoBed®Home (see full assortment next side)

<A> Object of Declaration

RotoBed®Home

Product Name Model Number :

RBH-0001 including variants and accessories

Product description:

Functional bed with rotation of the surface, for home usage

 Is CE marked and meets the essential regulations of the Council Directives

Machinery Directive (EU) 2006/42/EF, and the Danish implementation of this regulation The electrical safety requirements of EMC 2014/30 / EU

Directive 2017/2102 (RoHS)

<C> Is CE marked and meets the essential regulations of Harmonized Standards

IEC 60601-2-52: 2009/AMD1: 2015 - Part 2-52

Medical electrical equipment - Part 2-52: Particular requirements for the basic safety and essential performance of medical beds

EN 60601-1:2006/A1:2013/A12:2014

Medical electrical equipment. General requirements for basic safety and

essential performance

EN 60601-1-2:2015, Edition 4:0part 1-2

Medical electrical equipment. General requirements for basic safety and essential performance. Collateral Standard. Electromagnetic disturbances.

Application of risk Management.

<D> Additional Information

EN12100

Update of version 31.12.2019, the date which the CE marking was affixed for the first time.

If product changes not prescribed by RotoBed® are made, the CE mark is invalidated.

Place / date

Lunderskov / 13.08.2020

CEO

RotoBed®

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RotoBed®Home manual ENG vers. 1.2. 08.2020

Original instruction