

# **Electronic Roller Shutter Belt Winder RolloTron Basic 1100**Translation of the Original Operating and Assembly Manual



#### Item No.:

1823 45 19

### **Dear Customer,**

With your purchase of a **RolloTron Basic 1100**, you have chosen a quality product manufactured by RADEMACHER. Thank you for the trust you have placed in us.

This roller shutter belt winder has been designed to provide optimal convenience and operability as well as in terms of ensuring solidity and durability. Having applied uncompromising quality standards and thorough testing, we are proud to be able to present this innovative product to you.

It's brought to you by all the highly-qualified personnel here at RADEMACHER.



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### 1. These instructions...



...describes how to install, connect the electrical system and operate your roller shutter belt winder RolloTron Basic 1100.

## 1.1 Application of this manual

- Before you begin, please read these instructions through completely and follow all the safety instructions.
- ◆ This manual is a component of the product. Please store it in an easily accessible place.
- When passing the RolloTron Basic 1100 on to a third party, this manual must be passed on as well.
- ◆ Damage resulting from non-compliance with these instructions and safety instructions will void the guarantee. We shall assume no liability for any consequential damage.

### 2. Hazard symbols

The following hazard symbols are used in this instruction manual:



Danger of fatal electric shock



Danger area / dangerous situation

### 2.1 Levels of danger and signal words

#### **↑** DANGER!

This hazard will result in serious injury or death if not avoided.

#### **↑** WARNING!

This hazard may result in serious injury or death if not avoided.

#### **▲** CAUTION!

This hazard may result in minor or moderate injury if not avoided.

#### **ATTENTION!**

This hazard may lead to property damage.

## 2.2 Symbols and depictions used

Description
Steps to be taken
Itemisation
List



Please read the respective manual



further useful information

# i

### 3. Safety instructions





The use of defective equipment can lead to personal injury and damage to property (electric shocks, short circuiting).

- ◆ Never use defective or damaged equipment.
- ◆ Check the RolloTron Basic 1100 and the provided mains cable beforehand for damage.
- Should you discover damage to the equipment, please consult our customer service department.



### Incorrect use leads to an increased risk of injury.

- ◆ Train all personnel to use the RolloTron Basic 1100 safely.
- ◆ This device may be used by children from 8 years of age upwards as well as by persons with reduced physical, sensory or mental capacities or with lack of experience and knowledge if they are supervised or have been instructed on how to use the device safely and if they understand what dangers may resulted from this.
- Children must not play with the device. Cleaning and user maintenance may not be carried out by children without supervision.

- Watch the moving roller shutter and keep other people away from the area to avoid injury in the event the shutters suddenly slip.
- Undertake all cleaning work on the roller shutters with the equipment disconnected from the mains power.

The mains socket and plug must be easily accessible at all times.



Exceeding the maximum permissible running time (KB) may overload and damage the RolloTron Basic 1100.

- ◆ The maximum permissible running time for a cycle may not be exceeded when the equipment is in operation. For this reason, the RolloTronBasic 1100 has a running time limit (KB) of four minutes.
- ◆ If the running time limit is triggered, then the RolloTron Basic 1100 must be left for at least 12 minutes to cool down. During this period, the indicator light flashes rapidly. Full operational availability is re-established after approx. one hour.

### 3. Safety instructions

According to DIN EN 13659, it is necessary to determine that the movement conditions for the shutters are maintained in accordance with EN 12045.

- ◆ The displacement must amount to at least 40 mm on the lower edge in the rolled-out position with a force of 150 N in the upwards direction.
- ◆ In doing so, it must be ensured that the extending speed of the shutters for the final 0.4 m is less than 0.15 m/s.

### 3.1 Intended use

Only use the RolloTron Basic 1100 for opening and closing roller shutters with a permissible belt.



Mechanical locks of any kind are not suitable for automated operation with this device.

### Only use original spare parts from RADEMACHER.

- By doing so, you avoid the risk of malfunctions and damage to your RolloTron Basic 1100.
- ◆ As the manufacturer, we provide no guarantee for the use of third-party components and accept no liability for consequential damage resulting from such.
- All repairs to the RolloTron Basic 1100 must be undertaken by authorised customer service personnel.

#### 3.1 Intended use



#### **Operating conditions**

- ◆ Only operate the RolloTron Basic 1100 in dry rooms.
- ◆ A 230 V / 50 Hz power supply, together with a siteprovided isolating device (fuse, MCB), must be permanently available at the installation location.

- An easily accessible 230 V / 50 Hz socket must be available at the installation site if the enclosed connecting cable with Euro plug is being used.
- The roller shutters must run up and down smoothly and should not stick.
- ◆ The mounting surface for the RolloTron Basic 1100 must be flat.

## 3.2 Improper use

Using the RolloTron Basic 1100 for purposes other than previously mentioned is impermissible.



There is a risk to life caused through short circuiting and electric shocks if the RolloTron Basic 1100 is used outside.

 Never install or operate the RolloTron Basic 1100 outside.

## 3.3 Required expert knowledge of the installer

The electrical connection, installation and commissioning of the RolloTron Basic 1100 must only be carried out by a qualified electrician in accordance with the instructions in this manual.

#### **DIN EN 13659**

"Shutters and external Venetian blinds - Performance requirements including safety."

This standard determines the performance requirements that externally attached shutters and blinds must fulfil. It also contains significant hazards with regard to the design, transportation, installation, operation and maintenance of these shutters and blinds.

#### Blinds

Roller shutters

#### **Obstacle detection**

◆ If the roller shutters hit an obstacle in the DOWN (♥) direction, the RolloTron Basic 1100 is switched off, see page 14.

#### **Overload cut-off**

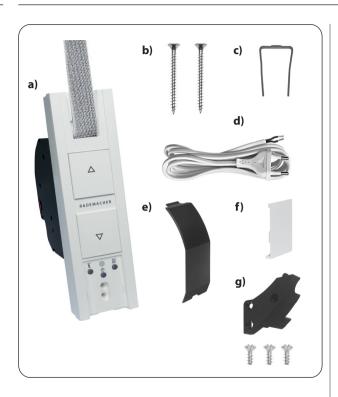
◆ If the drive jams in the UP (△) direction (for example, due to ice), the RolloTron Basic 1100 is switched off, see page 14.

#### **End points**

 An end point is defined and set for each running direction of the roller shutter. Once this point has been reached, the RolloTron Basic 1100 switches off and the roller shutter stops.

#### **Running Time Limit - Transient Operation (KB)**

◆ The roller shutter belt winder RolloTron Basic 1100 is not designed for continuous operation. Transient operation defined the maximum permissible running time, see page 6/15.



#### **Included in delivery**

- a) 1 x RolloTron Basic 1100
- **b)** 2 x Assembly screws (4 x 55 mm)
- c) 1 x Disengaging bracket (in housing)
- d) 1 x Connecting cable with Euro plug
- e) 1 x Reel compartment cover
- f) 1 x Cover plate
- g) 1 x Traction relief mechanism incl. assembly screws
- **h)** 1 x Instruction manual (not illustrated)

### After unpacking please check and compare...

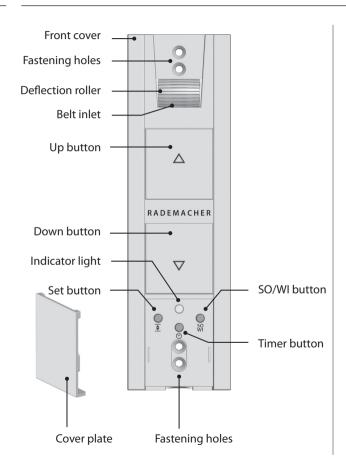
the contents of the package with the above specified.

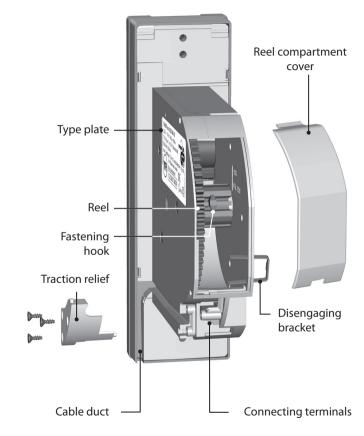
#### Check the details on the type plate

Check that the voltage / frequency on the type plate corresponds to the local mains conditions.

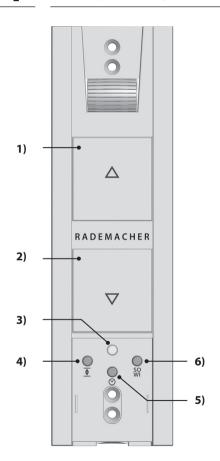
### 5. Overview RolloTron Basic 1100







## **5.1 Operating Buttons and Indicator Light**



Pos.	Symbol	Description	
1)	Δ	<b>Up / Stop button</b> The roller shutter travels upwards.	
2)	$\nabla$	Down / Stop button	
		The roller shutter travels downwards.	
3)	$\bigcirc$	Indicator Light - Status Display	
	red	flashes briefly	Return signal when pressing the timer button or the SO/WI button.
		continuous light	Status display of the respective function (10 seconds)
		flashes briefly	<ul> <li>During the setting process or when resetting.</li> </ul>
			<ul> <li>After a power failure</li> </ul>
4)	•	Set button	
		Setting the e	nd points.
5)	0	Timer button	
		◆ Setting b	oth switching times
		Switching on/off.	g the automatic timer function
6)	SO WI	SO/WI button	
	_ <del>_</del>	Switching be	tween summer and winter time.

### 6. Functional description

The RolloTron Basic 1100 is an electric roller shutter belt winder designed for use inside. The unit is installed as a flush-mounted device. The power supply is provided via the enclosed connecting cable with a mains plug or, if required, a fixed installed lead.

# Features and control options:

- Manual operation
- Automatic mode, with a separate switching time for UP ( $\triangle$ ) and DOWN ( $\nabla$ )
- Switching automatic mode on/off
- Summer/winter time changeover
- ◆ End point setting
- Permanent storage of the settings
- Obstacle detection
- Overload cut-off
- Resetting to the default factory settings (Reset)

#### **Obstacle detection**

The movement of the belt is monitored. If the roller shutters hit an obstacle in the DOWN ( $\nabla$ ) direction, the belt will stop moving and the RolloTron Basic 1100 is switched off.



Once the system has switched off, it is not possible to directly operate the drive in the same direction.

- First, run the belt winder back in the opposite direction and remove any possible obstacle.
- ◆ Then it is possible to operate the drive in the original direction again.



# There is a risk of injury if the obstacle detection is not working.

- The belt must be wound on as evenly as possible to ensure safe and correct functioning of the obstacle detection function.
- Please ensure that the belt winds as straight and evenly as possible into the device during its subsequent cycle after the obstacle detection system has triggered.

#### Overload cut-off

# The RolloTron Basic 1100 is equipped with an overload cut-off system.

If the drive jams in the UP ( $\triangle$ ) direction (for example, due to ice), the RolloTron Basic 1100 is switched off.

- ◆ First, remove the cause of the overload.
- Once the cause has been rectified, the RolloTron Basic 1100 is fully operational again in both directions.

### 7. Technical Specifications

Power supply		
Supply voltage:	230 V ~ / 50 Hz	
Nominal power:	70 W	
Consumption:	Standby: < 0.5 W	

Mechanical capacity:		
Nominal torque:	10 Nm	
Maximum speed:	30 rpm	
Maximum tractive force:	See page 39 / Tractive force diagram	

Operating conditions	
Transient operation (KB):	4 minutes (maximum running time)
Protection class:	Ш
Protection type:	IP20 (only for use in dry rooms)
Number of switching times:	2 (up and down)
Mains connecting cable:	2 x 0.75 mm <sup>2</sup> (H03VVH2-F)
Permissible ambient temperature:	0 °C to +40 °C
Noise pressure level (LpA):	≤ 70 dB(A)

#### Conduct in the event of power failure

The indicator light flashes in the event of a power failure.

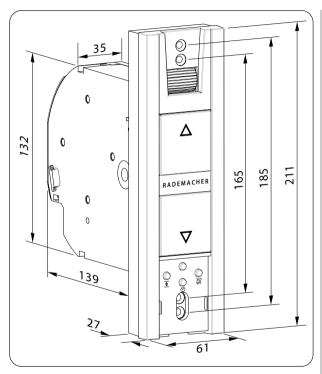
The flashing is switched off by pressing the UP ( $\triangle$ ) or DOWN ( $\nabla$ ) button.

#### Data retention subsequently to power failure

The configured switching times are retained after a power failure. As soon as the power supply is restored, the opening and closing times will be executed again. However, the times will be offset by the duration of the power failure.

#### **Example:**

- ◆ Power failure from 19:30 19:45 hours.
- The closing time was previously set to 19:30 hours.
- ◆ The roller shutters will close at 19:45 hours due to the duration of the power failure.



All dimensions in mm

RolloTron Basic 1100 Item no.: 1823 45 19

### ATTENTION!

The RolloTron Basic 1100 may be damaged if excessively long belts are used.

Only use belts of the permissible lengths.



The specifications are intended for guidance only and apply to an ideal installation situation.

The actual values may vary due to local conditions.

**Table 1: Permissible roller shutter belts** 

RolloTron: Item no.:		<b>Basic</b> 1823 45 19
Belt width:	Belt thick- ness:	Maximum belt length
	1.0 mm	7.6 m
23 mm (Standard belt)	1.3 mm	6.2 m
	1.5 mm	5.2 m

Table 2: Permissible shutter surface area (m<sup>2</sup>)

Roller shutter type:	Weight/m²	Permissible shutter surface area (m²)
Plastic roller shutters	(4.5 kg/m²)	Approx. 6 m <sup>2</sup>
Aluminium and wooden roller shutters	(10.0 kg/m²)	Approx. 3 m <sup>2</sup>

## 8. Safety instructions for the installation





Poor routing of the belt can cause the belt to fail and leads to unnecessary loads on the RolloTron Basic 1100.

 Install the belt winder so that the belt runs as straight as possible into the device, in order to avoid unnecessary friction and wear.

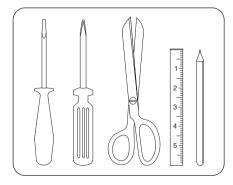


Incorrect installation can lead to property damage.

 Strong forces are exerted during operation of the system which require secure installation on a firm base.

## 8.1 You will require the following tools

- Screwdriver
- Scissors
- Carpenter's gauge or measuring tape
- ◆ Pen



### 8.2 Preparation for installation

- 1. Take measurements Check that the belt box has sufficient space to house the RolloTron Basic 1100.
- **2.** Remove the old belt winder, if you are carrying out a conversion to an existing roller shutter system.
- **2.1** Let the roller shutter move fully down, until the slats are completely closed.
- **2.2** Remove the old belt winder and unreel the belt.

#### **A** CAUTION!

There is a risk of injury from the pre-tensioned springs on the old belt winder.

- The spring unit of the old belt winder may suddenly recoil when it is removed.
- ◆ Hold the spring unit firmly when loosening the belt and allow it to recoil slowly until the spring unit has completely unwound.



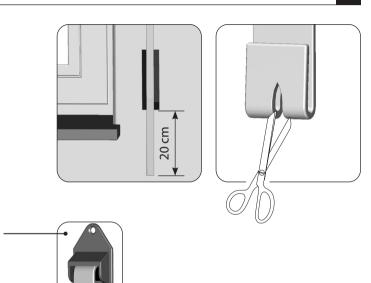


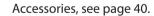
### 8.2 Preparation for installation

- 3. Prepare the belt.
- **3.1** Cut the belt off approx. 20 cm under the belt box.
- **3.2** Fold the end of the belt over by approx. 2 cm and cut a short slit in the centre. This enables you to subsequently hook the belt onto the reel.



The belt must run as straight and freely as possible. For stiff roller shutters, mount a deflection roller on the belt box. This helps to prevent unnecessary friction and wear to the belt.





## i

### 9. Safety instructions for the electrical connection



#### **DANGER!**



There is a risk of fatal electric shock when touching electrical components.

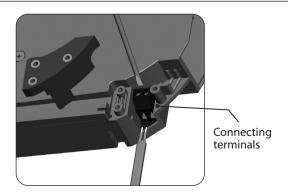
- Carry out all installation and connection work in an isolated and de-energised state.
- Disconnect all phases of the mains power supply cable and secure it to prevent any reconnection.
- ◆ Check that the system is de-energised.



The electrical connection can be made either with the supplied connecting cable or via a fixed laid cable on site.

## 9.1 Connecting the connecting cable to the RolloTron Basic 1100

Connect the provided connecting cable to the connecting terminals of the RolloTron Basic 1100.
 The colour coding is irrelevant for this connection.



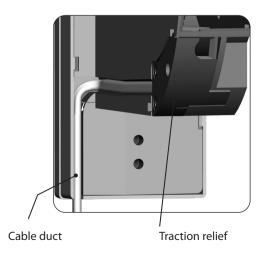
### 9.1 Connecting the connecting cable to the RolloTron Basic 1100

#### **↑** WARNING!

# A damaged connecting cable may cause a short circuit.

- ◆ Ensure that the connecting cable is laid safely.
- ◆ The connecting cable muse not be pinched or damaged when screwing on the RolloTron Basic 1100.

- **2.** Lay the connecting cable in the cable duct of the RolloTron Basic 1100.
- **3.** Finally, screw on the traction relief mechanism with the screws provided.



### 10. Drawing in and fastening the belt

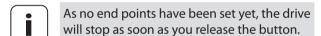
1. Insert the mains plug into the socket.

### **A** CAUTION!

#### There is a risk of injury from the reel.

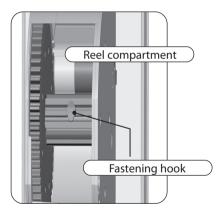
Never reach into the reel compartment when the motor is running.

**2.** Press the Up button until the fastening hook are easily accessible in the reel compartment.



**3.** Remove the mains plug again from the socket.





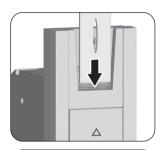


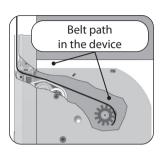
### 10. Drawing in and fastening the belt

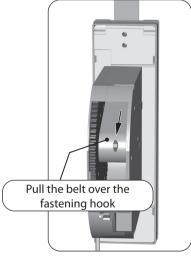
**4.** Next, draw-in the belt into the RolloTron Basic 1100 from the top.

Feed the belt into the device, as shown in the image, and slide it over the fastening hook from above.

- 5. Re-insert the mains plug into the socket.
- 6. Press the Up button until the belt has fully wound once around the reel.
- **7.** Pull the belt tight when winding, so that the deflection roller turns at the same time.
- **8.** Remove the mains plug again from the socket.
- **9.** Finally, place the provided reel compartment cover onto the reel compartment.









### 11. Installing the RolloTron Basic 1100

Mount the RolloTron Basic 1100 as straight as possible, so that the belt can wind correctly.

Ensure that the RolloTron Basic 1100 sits freely in the belt box and that it is not in contact with the masonry, otherwise this may cause noise during operation.

1. Slide the RolloTron Basic 1100 into the belt box and screw it tight using the screws provided.

#### **↑** WARNING!

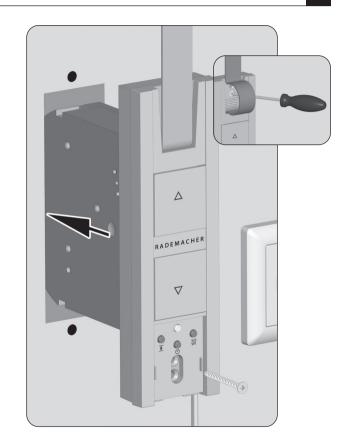
A damaged connecting cable may cause a short circuit.

Ensure that the connecting cable is laid correctly inside the cable duct, otherwise it can be crushed and damaged when the cover is screwed in place.

2. Re-insert the mains plug into the 230 V / 50 Hz socket.



Leave the bottom cover plate open until all settings have been carried out.



### 12. End point adjustment



# Additional information about configuring the end points

The end points must be configured for the roller shutters to stop at the desired upper and lower positions.

It is imperative that both end points are configured, otherwise malfunctions may occur.



If the RolloTron Basic 1100 is operated without an end point setting, the drive will continue to run for as long as one of the two control buttons is actuated.

The automatic functions remain blocked until the end point setting is configured.

#### Set the upper end point

The roller shutters travel up.

- **1.1** Tighten the belt slightly, until it is tensioned by the weight of the roller shutters.
- Release the buttons, as soon as the roller shutter reaches the desired position for the upper end point.

The roller shutters stop and the upper end point is stored.

#### ATTENTION!

Setting the wrong upper end point may lead to overload or damage the RolloTron Basic 1100 or the drive.

- Do not set the upper end point right up to the limit stop.
- Release the button promptly and never allow it to extend beyond the respective end point.

### 12. End point adjustment

#### Set the lower end point

3.  $\nabla$  +  $\overline{\bullet}$  Simultaneously press and hold the buttons.

The roller shutters travel down.

The roller shutters stop and the lower end point is stored.



Please ensure that the belt is not excessively slack when reaching the lower end point.

#### Changing or correcting the end points

**5.** Move the roller shutters to the centre position and configure the respective end point again.



After a period of time it may be necessary to reconfigure the end points as the belt may elongate during the process of operation.



### 13. Manual operation

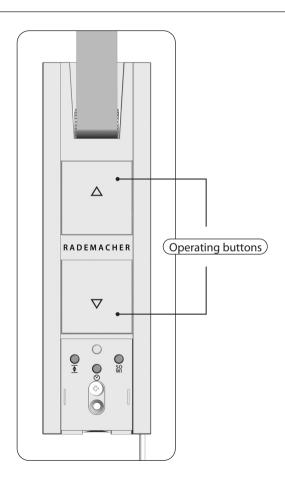
Manual operation is possible in any of the modes and has priority over the programmed automatic functions.

1.  $\triangle$  Open the roller shutters.

By briefly pressing the button, the roller shutters will move to the upper end point.

- **2.**  $\triangle$  or  $\nabla$  Stop the shutters in the interim.
- 3. Close the roller shutters.

  By briefly pressing the button, the roller shutters will move to the lower end point.



### 14. Setting the summer/winter time



The RolloTron Basic 1100 is equipped with a summer/winter changeover function. With this, the internal timer of the belt can be set to the summer or winter time.



The RolloTron Basic 1100 is delivered from the factory with the summer time.

#### Call up the current time status

- 1. So Briefly press the SO/WI button.
- 2. Pay attention to the indicator light.

  The indicator light flashes briefly to confirm that the SO/WI button has been pressed. The status of the summer/winter setting will then be displayed.



ON (10 seconds) = summer time



OFF = winter time

### Setting the summer/winter time

- 1. So Press the SO/WI button for approx. 1 second.
- The respective current time status will be changed over.

### 15. Automatic timer; brief description

#### The same switching times every day of the week.

You can set an opening and closing time for your RolloTron Basic 1100 which will apply to all days of the week. Once this time is reached, the roller shutters will open or close automatically.

#### Changing the switching times

You can change the switching time settings at any time. Please note that each new setting deletes the previous setting.



In order to set the switching times, you must carry out this step once at the time that the roller shutters are to open or close.

For example, carry out the step at 8:00 o'clock in the morning if you want the roller shutters to open at 8:00 AM every day.

 You must set at least one switching time, in order to activate the automatic timer.



### 15.1 Configuring an opening and closing time

Configure an opening time (△) (e.g. at 8:00 AM)

1.



Simultaneously briefly press the buttons.

2.



The indicator light flashes and the roller shutter travels upwards. The automatic timer is now activated.

Your roller shutters will open automatically every day at 8:00 AM.



### 15.1 Configuring an opening and closing time



Configure a closing time  $(\nabla)$ (e.g. at 20:30 hours)

 $\nabla$ + $\bigcirc$ 

Simultaneously briefly press the buttons.

2.

The indicator light flashes and the roller shutter travels downwards. The automatic timer is now activated

Your roller shutters will close automatically every day at 20:30.



### 15.2 Switching the automatic timer on / off

If required, the automatic timer can be switched on or off at any time.

1.

0

Press and hold the timer button for approx. 1 second.

Pay attention to the indicator light.

The indicator light flashes briefly to confirm that the timer button has been pressed. The status of the automatic timer will then be displayed.

OFF

Automatic timer OFF

The previously configured switching times are stored.



ON (10 seconds)

Automatic timer ON



Flashing

After power failure, if at least one switching time was previously been configured.



In the event of power failure, the switching times will be extended by the duration of the power failure, and therefore may require reconfiguration.

If necessary, you can erase all of your settings and return the RolloTron Basic 1100 system to its original factory settings.

**1.** Remove the cover plate from the lower assembly screws and setting buttons.



- 2. Simultaneously press and hold the buttons for 4 seconds.
- 3. The indicator light flashes rapidly.
- **4.** Release the buttons, subsequently all of the settings will be deleted.
  - End points
  - ◆ Timer periods
- **5.** The indicator light will go off once the button is released.

### 17. Removing the RolloTron Basic 1100 (e.g. in the event of a move)

1. Remove the cover plate from the lower assembly screws and setting buttons.

2. Frase all settings.

Simultaneously press and hold the buttons for 4 seconds.

**3.**  $\nabla$  Fully close the roller shutters.

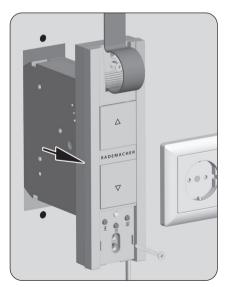
**4.**  $\nabla$  Continue to press and hold the down button.

5. In this process, pull out the belt as far as possible from the top of the RolloTron Basic 1100.

Remove the mains plug from the socket.

7. Subsequently, release the assembly screws and pull the RolloTron Basic 1100 completely out of the belt box.





## 17. Removing the RolloTron Basic 1100 (e.g. in the event of a move)

- 8. Remove the reel compartment cover.
- **9.** Check the position of the fastening hook.
- **10.** If necessary, move the fastening hook into an easily accessible position.

### **A** CAUTION!

#### There is a risk of injury from the reel.

- Never reach into the reel compartment when the motor is running.
- ◆ Always remove the mains plug before touching the reel compartment.
- 11. Finally, remove the mains plug again from the socket.
- **12.** Release the belt from the fastening hook and pull it out completely from the front of the RolloTron Basic 1100.







### 18. Removing the belt in the event of unit failure



In the event that the RolloTron Basic 1100 unit fails and the motor no longer runs, you can use the disengaging bracket provided in order to fully remove the belt from the belt winder unit, without the need for cutting it.

1.



Remove the mains plug from the socket

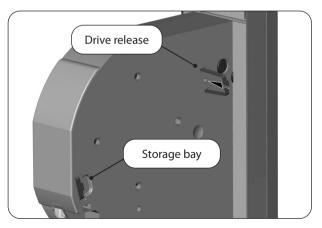
Dismantle the RolloTron Basic 1100 as previously demonstrated on page 33.

#### **↑** WARNING!

There is a risk of injury as the roller shutters may slam shut or fall in an uncontrolled manner.

- ◆ Secure the roller shutters from falling.
- Hold on to the belt tightly to stop the roller shutters from slamming shut or falling in an uncontrolled manner.
- Get a second person to help you unlatch the unit.

- **3.** Release the drive with the help of the supplied disengaging bracket. A small amount of resistance must be overcome when pressing.
- **4.** Maintain pressure on the disengaging bracket and pull the belt out of the RolloTron Basic 1100 as far as possible.
- Release the belt from the fastening hook and pull it out completely from the RolloTron Basic 1100.
- 6. Replace the disengaging bracket in its holder.



### 19. What to do if ... ?

Fault	Possible cause / solution
the RolloTron Basic 1100 indicates no functions?	Check the power supply incl. connecting cable and plug.
the RolloTron Basic 1100 no longer reacts in the morning at the configured switching time?	a) There may have been a power failure. Reconfigure the switching times, see page 30.
	b) The end points may not be configured. Reconfigure the end points, see page 26.
the indicator light (LED) is flashing?	There may have been a power failure. Reconfigure the switching times, see page 30.
the roller shutters no longer stop at the configured end points?	The end points may be displaced due to elongation of the belt. Readjust the end points, see page 26.
the roller shutters stop as soon as the control button is released?	The end points are not configured. Configure the end points, see page 26.
the RolloTron Basic 1100 rotates in the wrong direction?	Possibly the belt is wrapped around the reel incorrectly, see page 23.
the roller shutters stop suddenly during upward travel?	a) The drive may be jammed, for example, due to the roller shutters freezing up or other obstacles.
	b) The roller shutters may not be running sufficiently smoothly. Check the roller shutters and roller shutter guides.
	d) The roller shutters may be too heavy. The maximum tractive force of the belt winder has been exceeded, see page 39.

### 19. What to do if ... ?

Fault	Possible cause / solution
the roller shutters stop during downward travel?	a) The roller shutters may have hit an obstacle.
	Move the roller shutters back up and remove the obstacle.
	b) Slats have shifted out of alignment.
	If possible, move the roller shutters back up and realign the slats.
	c) The roller shutters scrape against the window frame inside the roller shutter box due to the lack of a pinch roller or insulation material may have come free and is jamming the roller shutters.
	Open the roller shutter box and rectify the fault. Lubricate any stiff areas with gliding wax if necessary.
	d) The roller shutters are too light.
	Increase the weight of the roller shutters by, for example, adding a piece of flat steel to the bottom slat.
the indicator light flashes and the RolloTron Basic 1100 fails to operate in either direction?	The maximum running time of the drive has been exceeded, see page 6/15.
	The motor is too hot. The belt winder will be fully operational again in approx. 1 hour.
the RolloTron Basic 1100 fails to react properly either manually or automatically?	The RolloTron Basic 1100 is no longer operational. Carry out a software reset in accordance with the instructions on page 32 and test the RolloTron Basic 1100 using the default factory settings.

#### Maintenance

#### **A** CAUTION!

A lack of maintenance can lead to personal injury through damage to your RolloTron Basic 1100 and the roller shutter system.

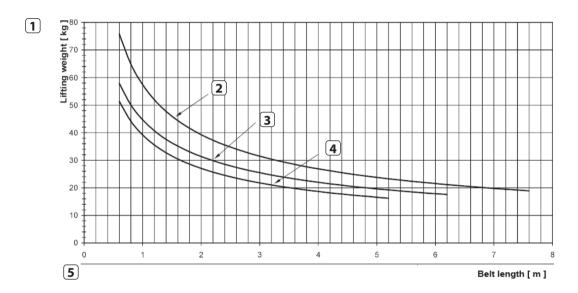
- Please check the RolloTron Basic 1100 and all of your roller shutter components regularly for damage.
  - Regularly check the RolloTron Basic 1100 for correct functioning.
  - The blinds must not be damaged.
  - The belt may not be frayed.
  - The deflection roller on the roller shutter box must move freely.
  - The reel plate in the roller shutter box must be fastened and stable. It may become less stable when used over a longer period of time.
- Damaged components should be exchanged by a specialist roller shutter firm.

#### Care

You can clean the RolloTron Basic 1100 using a damp cloth. Please do not use aggressive or abrasive cleaning agents.

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## 21. Tractive force diagram



- 1 Lifting weight [Kg]
- 2 Belt thickness 1.0 mm
- **3** Belt thickness 1.3 mm
- 4 Belt thickness 1.5 mm
- **5** Belt length [m]

### 22. Simplified EU Declaration of Conformity



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RADEMACHER Geräte-Elektronik GmbH hereby declares that the **RolloTron Basic 1100** comply with the Directives **2006/42/EC (Machinery Directive)** and **2014/30/EU (EMC Directive)**.

The full text of the EU declaration of conformity is included with the product and is kept on file by the manufacturer.s.

RADEMACHER Geräte-Elektronik GmbH Buschkamp 7 46414 Rhede (Germany)

#### Warranty terms and conditions

Information about the warranty conditions of our products can be found on our homepage.

### 23. Accessories

A comprehensive range of accessories is available for customising your RolloTron Basic 1100 to local conditions.

Further information about our accessories is available at the following website:

www.rademacher.de/zubehoer

#### **RADEMACHER**

Geräte-Elektronik GmbH Buschkamp 7 46414 Rhede (Germany)