

Operating and maintenance instructions



WAREMA external venetian blind

Der SonnenLichtManager

Original instructions
To be handed over to the operator.
Please keep for future use.

Table of contents

Table of contents

1	Introduction.....	3
1.1	Information on safety.....	3
1.2	Information on the target group and application of these instructions.....	3
1.3	Explanation of the signal words.....	3
1.4	Basic safety instructions.....	3
2	Product information.....	4
2.1	Intended use.....	4
2.2	Parts description.....	5
2.3	Electric drive data.....	5
2.4	Wind resistance.....	5
2.5	Declaration of performance.....	7
3	Operation.....	8
3.1	Product with motor.....	8
3.2	Product with crank.....	9
3.3	Incorrect operation.....	9
4	Service.....	10
4.1	Cleaning and care.....	10
4.2	Maintenance.....	13
4.3	Repair.....	13
4.4	Spare parts.....	13
4.5	Warranty.....	13
5	Dismantling/disposal.....	13
6	Troubleshooting.....	15
7	Declaration of Conformity.....	17

1 Introduction

1.1 Information on safety

It is important to follow these instructions in the interest of personal safety. Failure to comply with these instructions when operating the product may result in personal injury and/or property damage. Failure to comply with these instructions relieves WAREMA of liability.



Warnings are marked in the instructions with this symbol or a similar symbol.



- Read through the product instructions before use.
- Observe the safety, operating and maintenance instructions.
- Include these instructions when passing the product on to a new owner.
- Keep the instructions for use until you dispose of the product.

1.2 Information on the target group and application of these instructions

Target group

These instructions are directed at people who operate, care for and/or maintain the product.

The activities listed in the "Maintenance" chapter are only permitted to be executed by a qualified specialist.

Contents

These instructions are an integral part of the following product: external venetian blind

The instructions contain important information on the operation, care and maintenance of this item. They describe how to operate products with WAREMA standard drives. Other drives and special solutions are not dealt with.

Permissible activities

Performing tasks on the product that are not described in these instructions is not permissible. No other alterations, additions, conversions or maintenance work is to be carried out on the product other than as described in these instructions without the written approval of WAREMA.

1.3 Explanation of the signal words



DANGER

Identifies an imminent danger that may result in death or serious injury.



WARNING

Identifies a potential danger that may result in death or serious injury.



CAUTION

Identifies a potential danger that may result in light injury.



NOTICE

Identifies a potential situation that may result in product or property damage.

1.4 Basic safety instructions

The safety instructions and warnings described here are intended to safeguard your health and to protect the product. These instructions must be read carefully and followed.

Damage resulting from inappropriate use or the failure to follow these instructions is not covered by the warranty. Liability will not be accepted for secondary damage.

General operation

The operation of a faulty product may injure persons and/or damage adjacent parts.

- ▶ Only operate the product if it is in technically perfect condition.
- ▶ If the product makes unusual noises or movements, stop using it immediately and inform a qualified specialist.

Possible risk during operation

Incorrect operation can result in personal injury. The movements of the product can lead to crushing of the limbs.

- ▶ While the product is moving, do not reach between the moving parts.
- ▶ Do not reach into openings on the product while operating the product.

Monitoring duty during operation

Failure to monitor the product while it is moving may result in personal injury and property damage.

- ▶ Keep people and animals out of the projection area.
- ▶ Remove obstacles from the projection area.

Introduction

Operation in the event of a power supply interruption

An electrically-operated product cannot be operated without power. A lowered product may be subjected to impermissible loads when bad weather fronts pass over or during power failures. This may also result in serious personal injury and/or damage to the product.

- ▶ In windy areas with frequent power failures, manual emergency operation or an emergency power supply should be considered

Accessing the operating element (electrically operated product)

The operating element is not intended for children to use. Children are unable to recognize the danger associated with the product. Persons can become injured from careless use.

- ▶ Do not allow children to play with the locally installed control system or operating element.
- ▶ The hand-held transmitter must be kept out of the reach of children.

Operation in wind

The product is only able to withstand the loads associated with the specified wind speed limits (see the wind resistance section in these instructions). Before bad weather arrives special precautions must be taken. Even when using a control, sudden strong gusts of wind can damage the product, e.g. after the control has triggered the move command to raise the product to the upper limit position.

- ▶ The product must be raised if the wind speed limits are exceeded (see wind resistance chapter in these instructions).
- ▶ Before bad weather arrives, the product must be raised by hand immediately.
- ▶ All other movements of the product must be prevented while the wind speed limit is exceeded.

Operation in icy conditions/winter (general procedure)

The operation of the product with temperatures around or below the freezing point can lead to malfunctions and/or damage to property in the case of unfavourable installation and building situations. After an impact with condensation water, rain or snow the product can freeze up with low temperatures.

- ▶ Before operation the product must be freed from snow and ice in order to make it operable.
- ▶ The operation of the product while iced over is forbidden.

Operation in winter (product with control system)

Products operated by a control system may start moving at any time and without prior notice. After an impact with condensation water, rain or snow the product can freeze up with low temperatures. Operation of the product may cause damage.

- ▶ When using a control system without an ice alarm, the automatic control mode should be switched off in winter.

Risk of damage to the product

An additional load can damage the product and/or cause it to detach from its mount.

- ▶ Do not hold onto the product or lean any objects against it.

2 Product information

2.1 Intended use

The following details apply to the following product: external venetian blind

The product is an external sun shading system that may be used for sun protection and glare control. The product reduces the incidence of light and optimises the use of solar energy.

Installation in front of escape doors and escape windows is prohibited.

Inappropriate use may result in serious hazards.

All closures and awnings intended for external use are designed to handle a wind load of 1.1 kN/m² when retracted.

The directive entitled "Wind loads for construction of closures and awnings when retracted – Section 5.1.1" defines the positions at which these products can be installed without requiring special precautions [published by the Bundesverband Rollladen + Sonnenschutz e. V. and ITRS Industrieverband Technische Textilien - Rollladen - Sonnenschutz e. V.].

Additional loads on the product in the form of hanging objects could damage the product or cause it to detach from the wall and are therefore not permitted. WAREMA will not be liable for any ensuing damage.

To ensure intended use of the product it must be raised in time before any of the following conditions occur:

- Wind above the maximum permitted wind speed limit
- Snowfall
- Storm fronts and bad weather fronts (gusts)

The intended use also includes observing these instructions and adhering to the service requirements they describe.

2.2 Parts description

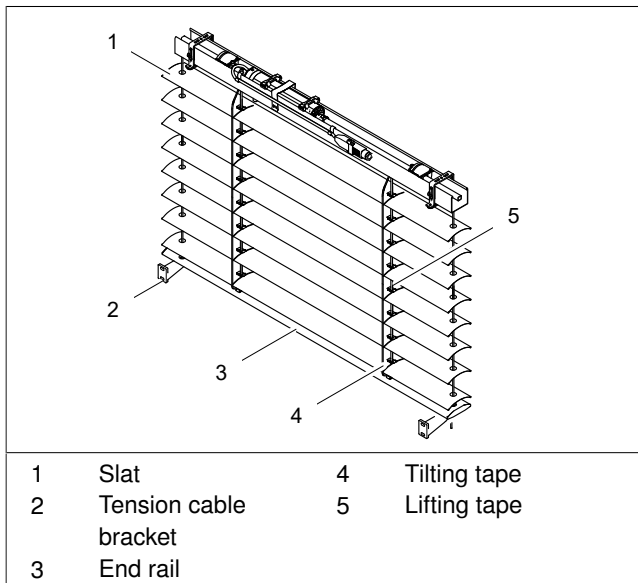


Fig. 1: Parts overview for the external venetian blind with cable guidance

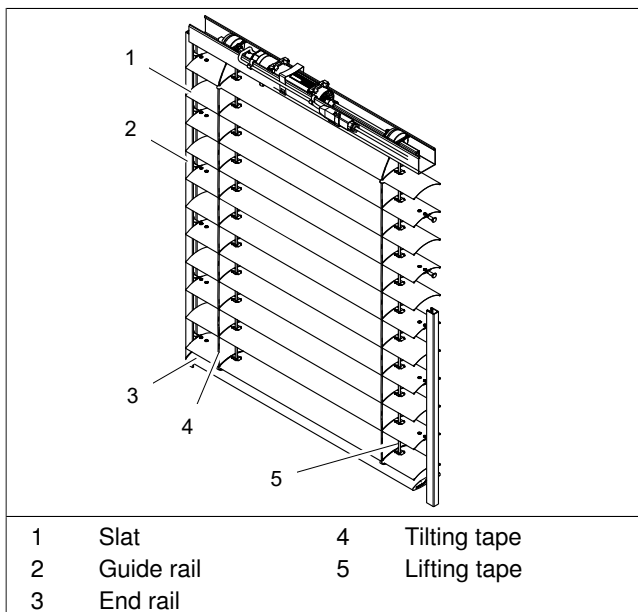


Fig. 2: Parts overview for the external venetian blind with rail guidance

2.3 Electric drive data

Parameter	Value
Current consumption [A]	0.42 - 0.85
Rated voltage [V DC]	230 V / 50 Hz
Degree of protection	IP 44
Short-term operation (S2)	4 min.
Emissions sound pressure level	< 70 dB(A)*

* The sound pressure level LpA in a standard installation of the product on a test stand is ≤ 70 dB(A). This value may vary depending on the specific installation.



INFO

The table above shows a summary of the permissible motors.

2.4 Wind resistance

The product has the following resistance to wind loads: class 0

Class 0, since standard test stands cannot be used in the applicable test standard due to mechanical inadequacies of the test description.

Use recommendations for the product (depending on the order dimension and the type of slat) are specified for the correct use with maximum wind speeds (wind speed limits) in m/s angegeben, die nicht überschritten werden dürfen. When the wind speed limits are reached, the product must be raised.

If a wind sensor is used, it must be ensured that the set wind speed limit relates to the wind speeds that actually occur at the product. In addition, the positioning and number of wind sensors used is dependent on the geometry and position of the building.

Product information

Basis of the following table:

- ▶ The external venetian blind is lowered / The window is closed.
- ▶ Facade distance of slats: $\leq 100 \text{ mm}$
- ▶ Zetra slats - 1 point must be fulfilled: Table applicable
 - Reveal installation
 - Partitioning profile
 - Closed guide rail
- ▶ Windra flat slats - all points must be fulfilled: Table applicable
 - Minimum axial dimension 85 mm
 - Maximum axial dimension Achsmaß 200 mm
 - Tension cable with spring tension device and threaded piece
 - Threaded piece designed for a force of 600 N per tensioning cable / screw-in depth min. 30 mm
 - On-site bracket fixing designed for a force per tension cable of 600 N

Height [mm]	Width [mm]								
	1000	1500	2000	2500	3000	3500	4000	4500	5000
1000	17	17	13	13	13	10	10	10	10
1500	17	17	13	13	13	10	10	10	10
2000	17	17	13	13	13	10	10	10	10
2500	17	17	13	13	13	10	10	10	10
3000	17	17	13	13	13	10	10	10	8
3500	17	17	13	13	13	10	10	10	8
4000	17	13	13	13	10	10	10	8	8

Tab. 1: Permissible wind speed limits for flat slats with rail guidance depending on the width (= order width) and height (= order height) (details in m/s)

Height [mm]	Width [mm]				
	1000	1500	2000	2500	3000
1000	25	25	25	22	22
1500	25	25	25	22	22
2000	25	25	25	22	22
2500	25	25	25	22	22
3000	25	25	25	22	22
3500	25	25	25	22	22
4000	25	25	25	22	22

Tab. 2: Permissible wind speed limits for Windra flat slat with rail guidance depending on the width (= order width) and height (= order height) (details in m/s)

Height [mm]	Width [mm]								
	1000	1500	2000	2500	3000	3500	4000	4500	5000
1000	17	17	17	17	17	17	17	17	17
1500	17	17	17	17	17	13	13	13	13
2000	17	17	17	17	17	13	13	13	13
2500	17	17	17	17	17	13	13	13	13
3000	17	17	17	17	17	13	13	13	13
3500	17	17	17	13	13	13	13	13	10
4000	17	17	17	13	13	13	13	10	10
4500	17	17	17	13	13	13	10	10	10
5000	13	13	13	13	13	10	10	10	10

Tab. 3: Permissible wind speed limits for beaded slat and dim-out slat with rail guidance depending on the width (= order width) and the height (= order height) (details in m/s)

Height [mm]	Width [mm]							
	1000	1500	2000	2500	3000	3500	4000	4500
1000	22	22	20	17	17	17	17	17
1500	22	22	20	17	17	17	17	17
2000	22	22	20	17	17	17	17	17
2500	22	22	20	17	17	17	17	17
3000	22	22	20	17	17	17	17	17
3500	22	22	20	17	17	17	17	17
4000	22	22	20	17	17	17	17	13
4500	22	22	20	17	17	17	13	13

Tab. 4: Permissible wind speed limits for Zetra slat with rail guidance depending on the width (= order width) and height (= order height) (details in m/s)

Height [mm]	Width [mm]								
	1000	1500	2000	2500	3000	3500	4000	4500	5000
1000	17	17	13	13	13	10	10	10	10
1500	17	17	13	13	13	10	10	10	10
2000	17	17	13	13	13	10	10	10	10
2500	17	13	13	13	10	10	10	10	10
3000	13	13	13	10	10	10	8	8	8
3500	13	13	10	10	10	8	8	8	8
4000	13	10	10	10	8	8	8	8	8

Tab. 5: Permissible wind speed limits for flat slats with cable guidance depending on the width (= order width) and height (= order height) (details in m/s)

Height [mm]	Width [mm]								
	1000	1500	2000	2500	3000	3500	4000	4500	5000
1000	17	17	17	13	13	13	13	13	13
1500	17	17	17	13	13	13	13	13	10
2000	17	17	17	13	13	13	13	13	10
2500	17	17	13	13	10	10	10	10	10
3000	13	13	13	10	10	10	8	8	8
3500	13	13	10	10	10	8	8	8	8
4000	13	10	10	10	8	8	8	8	8

Tab. 6: Permissible wind speed limits for beaded slat and dim-out slat with cable guidance depending on the width (= order width) and the height (= order height) (details in m/s)

Height [mm]	Width [mm]			
	1500	2000	2500	3000
1000	22	22	17*	17*
1500	22	22	17*	17*
2000	22	22	17*	17*
2500	22	17*	17*	15*
3000	17*	17*	15*	15*
3500	17*	15*	15*	15*
4000	17*	15*	15*	13*

Tab. 7: Permissible wind speed limits for Windra flat slats with cable guidance depending on the width (= order width) and height (= order height) (details in m/s)

The table values should be raised or lowered in the following cases. The maximum value is 17 m/s (note special feature of Windra flat slat).

- 1 Facade distance
 - > 100 to 300 mm (rail-guided) Reduce the table value by 1 level (e. g. 17 to 13 m/s)
 - > 200 to 300 mm (cable-guided) Reduce the table value by 1 level (e. g. 17 to 13 m/s)
 - > 300 to 500 mm Reduce the table value by 2 levels (e. g. 17 to 10 m/s)
 - > 500 mm Table not applicable
- 2 Reveal installation
 - Order width ≤ 3000 mm Increase the table value by 1 level (e. g. 13 to 17 m/s)
- 3 Material thickness
 - < 0,4 mm Reduce the table value by 1 level (e. g. 17 to 13 m/s)
- 4 Slat geometry (slat with strong profile) with rail guidance (Exception: corner solution)
 - Dim-out slat Increase the table value by 1 level (e. g. 13 to 17 m/s)
- 5 Corner solution
 - Corner solution Reduce the table value by 1 level (e. g. 17 to 13 m/s)
- 6 Lamellenbreite
 - 150 mm Reduce the table value by 1 level (e. g. 17 to 13 m/s)
- 7 Zetra slat:

Prerequisite: The values are only valid in combination with reveal installation, partitioning profiles or closed guide rails.

 - Other situations: Table not applicable Use table "beaded slat ans dim-out slat rail-guided"
 - Corner solution Use table "beaded slat ans dim-out slat rail-guided"

- 8 Windra flat slat:

Prerequisite for improvement: Compliance with minimum axis dimension of 100 mm and additionally one of the following points. The maximum value is 20 m/s.

 - (*) Use of higher-level control system (Special feature: control system does not allow intermediate position) Increase the table value by 1 level (e. g. 17 to 20 m/s)
 - or
 - (*) Integration of an additional tension cable

2.5 Declaration of performance



The declaration of performance can be found at (www.warema.de/ce).

3 Operation

INFO

- Only operate the product if it is in technically perfect condition.
- Do not operate a product if it is damaged. Always contact the specialist dealer and protect the product against being operated as agreed with the specialist.

NOTICE

Property damage from incorrect position of the end rail when the product is stopped.

At low wind loads, sections of partially lowered external venetian blinds with cable guidance may hit the facade.

- Always fully raise or lower the external venetian blind.

3.1 Product with motor

INFO

To control the WAREMA vivamatic® sun shading products, WAREMA climatronic® 2.0 (or newer) is required in combination with the switch actuator 4M230I.

When operating external venetian blinds with WAREMA vivamatic®, the separate instructions must be followed.



WARNING

Risk of crushing from failure to exercise care during operation.

Persons who are located within the projection area may be injured.

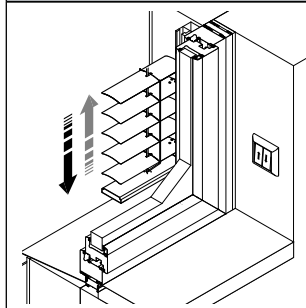
- Keep the path of the product clear of people.
- Keep children away from the operating elements.

INFO

During the cold season, unfavourable installation and building situations can lead to malfunctions or damage due to the effects of sub-zero temperatures and ice. This is caused by moisture on the product due to dew, rain or snow that freezes. This moisture freezes at sub-zero temperatures.

This is a physical process that cannot be influenced by the manufacturer. Even electrical drives with obstacle detection do not provide absolute protection.

Movement



- Operate the switch. The product moves in the selected direction.



INFO

The product has an upper and lower limit position. The product automatically stops at this point.

The product can be stopped in any position.

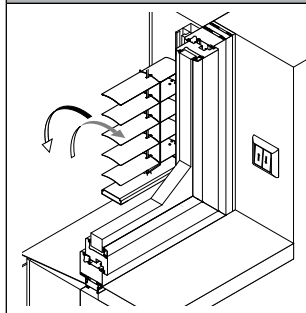
External venetian blinds with cable guidance must always be fully raised or lowered.



INFO

The slat position cannot be changed in external venetian blinds with fixed slats (e. g. external venetian blinds for arched windows). Tilting is not possible.

Changing the slat position



- Operate the switch briefly. The slats tilt in the selected direction.

Every additional brief operation of the switch changes the slat position further. If the switch is operated for a longer period, the product moves in the selected direction.

Operation using a central control unit



NOTICE

Product damage from failure of the control unit!

Under certain external conditions, such as a power failure or a malfunction, the control unit will not be functional. In this case, the control unit will not be able to operate the product and the product may be exposed to extreme loads caused by the weather conditions.

- Set the control to manual operation if you are going to be away for a long period.

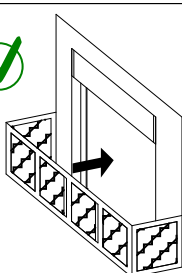


INFO

of the motors used are not intended for continuous operation.

The integrated thermal protection switches the motor off after approx. 4 minutes. The product will be ready again for use after 10 to 15 minutes.

- Adjust the control unit in such a way that continuous operation of the motor is not possible.
- Follow the operating and installation instructions of the control unit.



Before using your balcony or terrace, switch off the automatic control mode if the product is mounted in front of the only entrance.

3.2 Product with crank



NOTICE

Product damage from forceful operation!

When operating the product, excessive force must not be applied to the operating element if any resistance is encountered.

- Stop operating/moving the element as soon as you feel resistance.



INFO

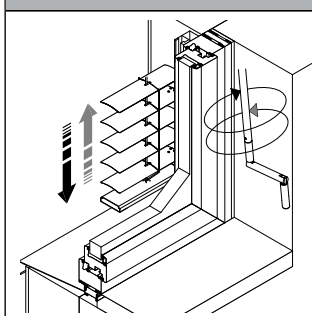
An excessive angle in the crank rod makes the crank difficult to move and causes excessive wear. Malfunctions may occur.



INFO

Slow the turning motion of the crank before you reach a limit position.

Movement



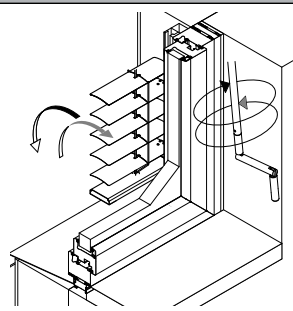
- Turn the crank. The product moves in the selected direction.



INFO

The product can be stopped in any position.

Changing the slat position



- Turn the crank. The slats tilt in the selected direction.
- The product moves in the selected direction if the crank is turned again.

3.3 Incorrect operation

Accessibility of the operating elements

- Never let children play with the operating elements of the product, such as the hand-held transmitter or switch.
- Keep the hand-held transmitter out of the reach of children.

Danger of crushing, shearing and entanglement



- While the product is moving, keep persons away from the product.
- While the product is moving, do not reach between the moving parts. Limbs can get caught between or in the moving parts and may become crushed or severed.

Products operated by means of a control unit may start moving at any time and without prior notice. Inform people, including children, who may be located in the vicinity of the product about the danger involved with the product to eliminate the risk.

Operation

Operation in stormy weather

	The product must be raised by hand before a bad weather front passes over, even if a control is being used. The control triggers a move command for the product if the set limit value is exceeded in order to move it to the protected upper limit position. If strong gusts of wind come up suddenly, the product is exposed to a larger load for which it was not designed for an indefinite period. ■ Raise the product if the wind speed limits are exceeded. ■ Before bad weather arrives, the product must be raised by hand immediately. ■ All other movements by the product must be prevented under heightened wind loads.
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Operation in cold weather or winter

	NOTICE Product damage from forceful operation! After an impact with condensation water, rain or snow, the product can freeze up at low temperatures. ■ Do not use the product under icy conditions. The product may be used again after thawing. ■ When using a control unit without an ice alarm, automatic operation should be deactivated in winter.
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	■ Do not raise or lower the product in snow. ■ Do not operate the product if it is frozen. ■ Switch off the automatic control in winter.
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4 Service

Proper and regular cleaning and maintenance and the exclusive use of original spare parts are essential for trouble-free operation and a long product service life.



INFO

When performing product maintenance or working in the immediate vicinity of the product, e. g. when cleaning windows, product movement must be prevented.

A monitored overriding locking mechanism must eliminate all possible operation.



WARNING

Risk of injury from operation of the product when it is out of sight!



The product may unexpectedly start moving during cleaning or maintenance.

- De-energise the product and secure it against being switched on again.



CAUTION

Risk of injury from falling off the climbing aid!

Climbing aids (e. g. ladders, scaffolding, etc.) may tip over if improperly erected.

- Position climbing aids on level and firm ground.
- Do not lean climbing aids against the product.



CAUTION

Risk of injury from falling!

There is a risk of falling during maintenance work.

- Take suitable safety precautions to prevent or arrest falls.

4.1 Cleaning and care

Over time, a film of dirt will form on the surfaces of sun shading products due to environmental influences.

Due to the effects of solar radiation, this soiling can become permanently burnt into or stuck to the surface coating. These factors reduce the value and may impair the proper functioning of the sun shading product.

To enhance the durability of the sun shading product, its surfaces should be cleaned regularly or **at least once a year**.

In certain ambient conditions, such as those found near industrial zones and close to heavy road traffic, the sea (salty air) or swimming pools (air with chlorine), more frequent cleaning may help to protect against surface damage caused by these conditions and against the heightened risk of corrosion.

Purpose of cleaning and care

The benefit provided by regular and proper cleaning and care is that the value of the product is preserved and its service life extended. The purpose of repeatedly cleaning the product is to preserve the well-maintained appearance of both the building and the product.

Results of cleaning



NOTICE

Product damage from incorrect cleaning!

Incorrect cleaning procedures may result in damage to the product or product parts (e. g. slats may be bent). Surfaces and textures may be permanently altered (e. g. scratches).

- Do not use high pressure washers, steam washers, abrasive sponges, abrasive cleansers, or aggressive cleaning agents or solvents such as alcohol or naphtha.
- Do not use chlorinated cleaning agents on or near the product.

Under no circumstances will claims for damages arising from these cleaning instructions be honoured, since the effectiveness of these measures depends on a large number of factors that vary widely from case to case.

The effort required for cleaning and the cleaning results themselves depend on the degree of soiling. Surfaces that have been exposed to the influences of weather over many years but have not been cleaned are difficult, if not impossible, to restore to their original condition.

General information on cleaning



WARNING

Risk of injury from electric shock on a motorized product!

If a live component (e. g. motor) comes into contact with water, a short circuit may occur or electricity may flow.

- Keep water away from all live components.



Tip/recommendation

To properly clean the surfaces, use a suitable cleaning glove together with an appropriate cleaning agent concentrate for sun shading products.

The slat cleaning tongs are suitable for external venetian blind slats among other things.

Preparing for cleaning

- When cleaning the product, protect adjacent areas against soiling.

Aids required for cleaning:

- ▶ Whisk broom (soft bristles)
- ▶ Vacuum cleaner (optional)
- ▶ Bucket
- ▶ Low-calcium water (recommendation)
- ▶ WAREMA cleaner for sun shading systems
- ▶ WAREMA cleaning glove
- ▶ Cotton cloth

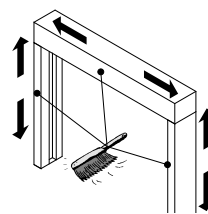


INFO

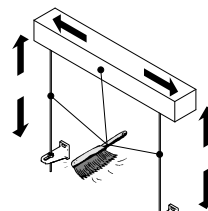
Step-by-step cleaning from top to bottom

- 1 Shaft or cover panel or box
- 2 Slat guide
- 3 Slats
- 4 End rail

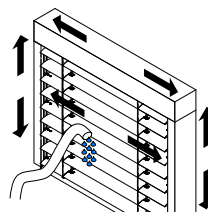
Performing preliminary cleaning



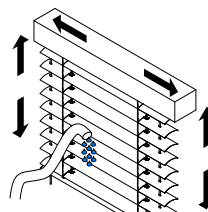
- Remove any loose soiling from the entire product (e. g. dust). A whisk broom or vacuum cleaner can be used for this.



or



- If the product is installed outside (outdoors), you can also rinse off loose dirt with clear water at a low water pressure.
- Before you start, remove any objects that must not get wet.



Performing detailed cleaning

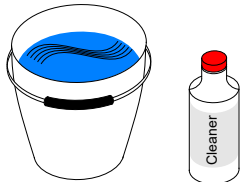


CAUTION

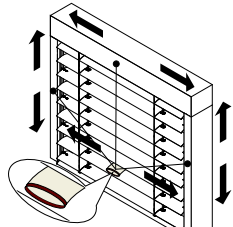
Risk of injury from the edges of flat slats!

The flat slats consist of thin-walled material. The edges of the flat slats may result in cuts to the hands and lower arms.

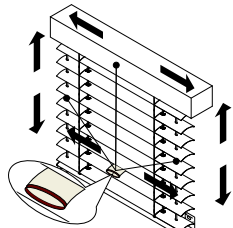
- When cleaning the slats, do not slide along the edges.
- When cleaning, do not reach through the slats.



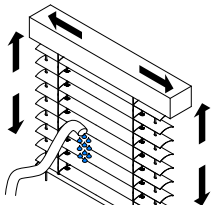
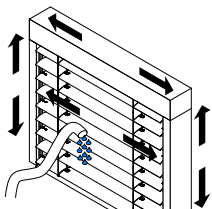
- Prepare a bucket with water and cleaning agent for sun shading products. Note the dosing quantities specified by the cleaning agent manufacturer.
- Wet the cleaning glove.



- Clean the product components with a wiping motion. Repeat the procedure as needed based on the degree of soiling.

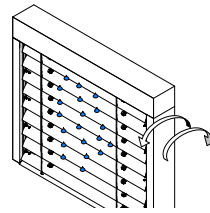


- Remove the detached soiling before drying.

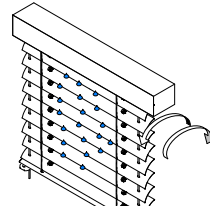


Drying the product

- Lower the product into the lower limit position.



- Open and close the slats to allow the water to drip off.
- Move the slats to the closed position and let them dry fully.



INFO

To prevent scale marks from forming around dried water droplets, the surfaces of the product can be rubbed dry using a microfibre or cotton cloth.

Cleaning the weather station (if available)



INFO

The weather station must be cleaned every three months to ensure the measured values are accurate and ensure operating safety and reliability.

Note the separate instructions for the weather station.

	■ Remove dirt from the transparent cover of the weather station. Use a moist cleaning glove for this purpose.
	■ Blow out the opening for the wind measurement. Do not introduce pointy objects.

Inspecting the product during cleaning

- Operate the product and inspect the operating elements, guide pins and lifting tapes for visible wear and damage (visual check).
- Check the mounting substructure for damage (visual check).



INFO

Wear and damage to the operating element or product as well as damage to the mounting substructure may impair the product and result in secondary damage.

If you should notice any irregularities during the visual check of the product, proceed as described below.

- Take the product out of service.
- Have any damage repaired by a qualified specialist.

4.2 Maintenance



CAUTION

Risk of injury from inadequate product knowledge!

Familiarity with the functions and design of the product is required to ensure that it can be worked on safely. Insufficient product knowledge can result in dangerous situations.

- Have service tasks performed by a qualified specialist.



The maintenance tasks must only be performed by a qualified specialist. We recommend signing a service agreement.

Service is a preventative maintenance and contributes to keeping a product functional as long as possible.

The product must be serviced at least once a year.



WARNING

Risk of injury caused by irregular maintenance!

Operating safety may be seriously diminished, and the product may fail. People can be injured from contact with damaged parts.

- Have the product checked regularly by a qualified specialist for signs of wear and damage, e.g. to electrical lines.

- Check the product for visible wear and damage. If necessary, make a recommendation to the owner.
- Check the fixing of the bearing elements (e. g. consoles, guide elements) for a tight fit. If necessary, make a recommendation to the owner.
- Check the tension of the cable guidance. Adjust the cable guidance tension if necessary.
- Perform a functional check, and inspect the limit positions of the product. Adjust the limit positions if necessary (see the installation instructions and/or setting instructions).



INFO

To ensure proper functioning and your continued enjoyment of the product, WAREMA recommends having it professionally maintained once a year.

Information on this can be obtained from your WAREMA contracting partner or at www.warema.de/service.

4.3 Repair



CAUTION

Personal injury resulting from inappropriate repairs!

Familiarity with the functions and design of the product is required to ensure that it can be worked on safely. Insufficient product knowledge can result in dangerous situations.

- The product should only be repaired by a qualified specialist.

4.4 Spare parts



INFO

To ensure that your product continues to function properly, and to prevent the loss of its approved status, only use original spare parts.

To order, contact your WAREMA dealer.

4.5 Warranty

Subject to the statutory period of limitation for warranty claims. This requires regular maintenance. The warranty does not include wear parts or optical changes in line with the type of material used (e. g. bleaching of surfaces caused by UV rays).

5 Dismantling/disposal



CAUTION

Risk of injury due to incorrect dismantling!

A lack of appropriate knowledge when dismantling the product can lead to injuries and/or damage to the adjacent parts.

- Have the units dismantled by a qualified specialist.

Dismantling/disposal

Dismantling of the product must be undertaken by a qualified specialist. Ask WAREMA for any missing documents before commencing maintenance.



INFO

Electrically operated products contain integrated electrical or electronic components, such as the motor, control and lines. These components must be removed and disposed of separately from the product as described below ([Disposal](#)).



WARNING

Electric shock!



When working in the immediate vicinity of potentially live parts, such as electrical lines, contact may result in an electric shock.

- De-energise the product and secure it against being switched on again.

Disposal

Should the product no longer be required, ensure that it is disposed of correctly in accordance with the relevant regulations.



Components identified in this manner should not be disposed of with the household waste.

Products marked with the symbol must be handled as follows according to legal regulations:

- The electric and electronic components removed from the electrically operated product and other electrical devices belonging to the product must be disposed of separately from unsorted household waste.
- Used batteries that are not enclosed in the used device and lamps that can be removed from the used device without destroying it are to be disposed of separately.
- Distributors of electric devices or disposal operations are required to take back the devices at no charge.
- Deletion of personal data contained in the electric device before disposal is the responsibility of the owner/operator.

6 Troubleshooting



INFO

- Problems described here without reference to a qualified specialist or certified electrician may be resolved independently.
- All other problems listed must be handled by a qualified specialist or certified electrician.

Fault: The motor is not functioning.			
	Cause	Remedy	Note
	The thermal protection switch on the motor was triggered.	Wait 10 to 15 minutes and then try again.	If the motor is operated at frequent intervals, the thermal protection switch on the motor switches it off to prevent it from overheating. The motor will be ready to operate again after it has cooled down. This is not a fault.
	A higher-level control command has been issued.	Wait for the on/off delay and then try again.	
	No voltage is applied.	Check the power supply fuse.	Have the check carried out by a certified electrician.
	The motor is faulty.	Replace the motor.	Have the motor replaced by a specialist firm.
	Only with ice formation comfort switch-off: In the UPWARD direction, the motor switches off when the allowable torque limit is exceeded	Issue a brief command in the DOWN direction. When the product moves down: stop the external venetian blind and check whether its path is blocked. If so: Eliminate the blockage and issue a command in the UP direction. If the motor stops again: Program the motor again for the external venetian blind.	Have the motor reprogrammed by a qualified specialist.

Fault: The end rail does not move to the limit positions.			
	Cause	Remedy	Note
	The guide rails are soiled.	Remove soiling.	
	The motor limit positions are incorrect.	Readjust the motor.	Have the adjustment carried out by a specialist firm.
	Textile components of the external venetian blind (lifting tapes and tilting tapes) are subject to changes caused by the weather.	Readjust the motor.	Have the product adjusted by a qualified specialist.

Troubleshooting

Fault: The crank rod is difficult or impossible to turn.

	Cause	Remedy	Note
	The gear is jammed or faulty.	Replace the gear.	Have the motor replaced by a qualified specialist.
	The pivot bearing is faulty.	Replace the pivot bearing.	Have the motor replaced by a qualified specialist.

Fault: The slats can be adjusted but the blind does not move up.

	Cause	Remedy	Note
	The lifting tape is torn.	Replace the lifting tape.	Have the motor replaced by a qualified specialist.

Malfunction: The external venetian blind is raised and lowered erratically.

	Cause	Remedy	Note
	The lifting tape is torn.	Replace the lifting tape.	Have the motor replaced by a qualified specialist.
	There is a blockage in the vicinity of the guide.	Move the external venetian blind up (down) slightly and then move it back down (up).	If the malfunction occurs again: Fully raise the external venetian blind and inform the qualified specialist.
	There is a blockage in the vicinity of the tilting tape or loop cord.	Move the external venetian blind up (down) slightly and then move it back down (up).	If the malfunction occurs again: Fully raise the external venetian blind and inform the qualified specialist.

Fault: The coupled external venetian blind reacts with a delay.

	Cause	Remedy	Note
	The locking screw of the tilt rod coupling is loose.	Tighten the locking screw.	Have a qualified specialist do the tightening.
	Tilt rod coupling is shifted to one side.	Centre the tilt rod coupling between the tilt rods and tighten the screw.	Have a qualified specialist do the centring and tightening.

7 Declaration of Conformity

Excerpt from the declaration of conformity; the full document is available at www.warema.de/ce.

The product:

WAREMA external venetian blinds

Type:

- Top-mounted external venetian blind AU-RA
- Top-mounted external venetian blind for new buildings NA-RA
- External venetian blind
- Basic external venetian blind
- External venetian blind window system FSR
- Self-supporting external venetian blind cover panel installation on / between guide rails
- T/M system cover panel
- Basic external shaft venetian blind
- Shaft external venetian blind system S1
- Asymmetrical external venetian blind
- Front-mounted external venetian blind R6/R10
- External shaft venetian blind OM4/SE/S2

Purpose:

External sun shading systems

When used as intended, meets the basic requirements in the following EU directives and harmonised standards.

Machinery Directive 2006/42/EC:

EN 13659

Shutters and external venetian blinds - Performance requirements including safety

EN 60335-2-97

Household and similar electrical appliances - Safety - Part 2-97: Particular requirements for drives for rolling shutters, awnings, blinds and similar equipment

RoHS Directive 2011/65/EU:

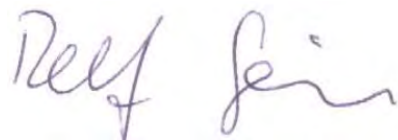
Directive on electromagnetic compatibility 2014/30/EU:

Used for motor drives without an integrated radio receiver.

Person in charge of the compilation of the technical documents: Elke Granzer; for address, see manufacturer.

Manufacturer:

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97828 Marktheidenfeld
Germany



Ralf Simon

Executive Director Research and Development



Elke Granzer

Technical Support R & D

Marktheidenfeld, March 2024

