Operating and maintenance instructions

WAREMA articulated arm awning Terrea
H60 / G60

*Der SonnenLicht**Manager***

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

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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: articulated arm awning Terrea H60

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.

Operation in the event of a power supply interruption

An electrically-operated product cannot be operated without power. A extended 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. 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 retracted if the wind speed limits are exceeded (see wind resistance chapter in these instructions).
- ▶ Before bad weather arrives or if warnings of bad weather are issued (thunder, storm, hail, extremely heavy rain etc.), the product must be retracted by hand immediately.
- ▶ All other movements of the product must be prevented while the wind speed limit is exceeded.

Operation in wet weather

In rain and at an inclination angle smaller than the specified value (see Chapter 2.5/Page 6), the awning must not be extended. There is a risk of water pocket formation. This may damage the awning and can pose a risk to people. In addition, moisture promotes wrinkling and waffling and causes impairment of the fabric.

Moisture promotes wrinkling and waffling and causes impairment of the fabric.

- ▶ Retract the awning during rain and do not extend it.
- ▶ Once the rain has stopped, fabric that has become wet should be extended so that it can dry.

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.

Malfunction due to leaves or foreign objects

External sun shading systems are exposed to weather and environmental influences. Depending on the location, leaves and other foreign objects can cause the product to malfunction.

- ▶ Remove leaves and other foreign bodies from the awning fabric.

Special features of fabric

Fabrics can become electrically charged. Contact with people or objects may result in an electrostatic discharge from charged fabric.

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 hang any objects on it.

2 Product information

2.1 Intended use

The following details apply to the following product: articulated arm awning Terrea H60

The product is an external sun shading system that may be used for thermal protection and glare control. The product is used to shade balconies and patios. The product should be installed under the roof overhang in a position that is protected from above. Due to the integrated rain hood that protects the awning fabric against weather when retracted, the product can be installed in a position that is unprotected from above.

The product is intended to be used to protect against the sun, not the rain.

Inappropriate use may result in serious hazards.

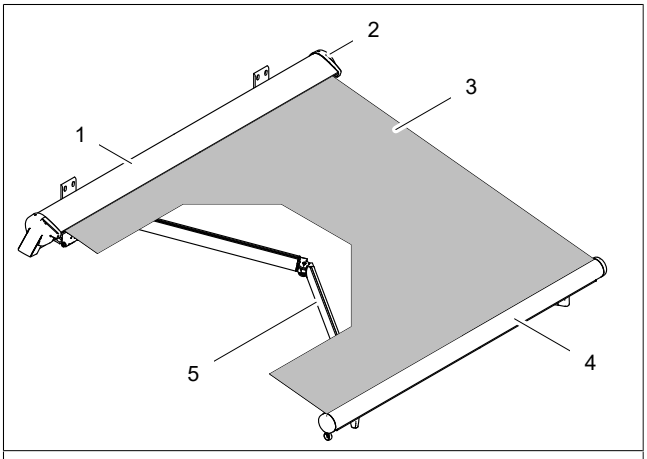
All closures and awnings intended for external use are designed to handle a wind load of 1.1 kN/m² when retracted.

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 or guy ropes could damage the product or cause it to become detached from the wall and are therefore not permitted. WAREMA will not be liable for any ensuing damage.

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

2.2 Parts description



1	Top profile	4	Front rail (e.g. with valance roller blind)
2	Side cover	5	Articulated arm
3	Awning fabric		

Fig. 1: Articulated arm awning H60/G60 (figure shows H60)

2.3 Electric drive data

Parameter	Value
Current consumption [A]	0.45–1.2 A
Rated voltage	230 V/50 Hz
Degree of protection	IP 44
Short-term operation (S2)	4 min
Emissions sound pressure level	LpA ≤ 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 1 [1]

The declared performance only applies to the product itself. The type of installation and the mounting substructure may reduce the maximum permissible wind speed.



The maximum permitted wind speed (wind speed limit) for the product when it is extended is: 10 m/s (Beaufort 5)

A lower wind speed may have been stipulated in the handover report.

The wind speed of 10 m/s is defined as a fresh wind or breeze, i. e. small deciduous trees begin to sway and white caps form on lakes.

If the maximum permitted wind speed is exceeded, the product must be retracted.

[1] The static test of resistance to wind loads is performed according to standard specifications using the maximum dimensions (height x width) defined by the manufacturer. The determined wind resistance class is shown above. The wind resistance class is 0 for a product above the defined dimension since it is not tested.

2.5 Resistance against water collection

The product fulfils performance class 2 starting at an inclination angle of 14°.

Performance class 2 is equivalent to precipitation of 56 l/m² per hour.

2.6 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.

The product can be equipped with additional functions, such as radiant heaters or light rails.

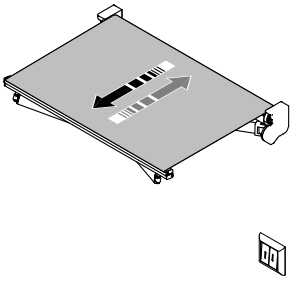
- Before operating the product, read and follow the separate instructions.

3.1 Product with motor

CAUTION
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.

Movement	
	■ Operate the switch. The product moves in the selected direction. ■ Press the button on the hand-held transmitter. 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.

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.

Operation using a hand-held transmitter

INFO
Instructions on how to operate the hand-held transmitter are contained in a separate manual for the hand-held transmitter.

3.2 Product with crank

NOTICE
Product damage from forceful operation!

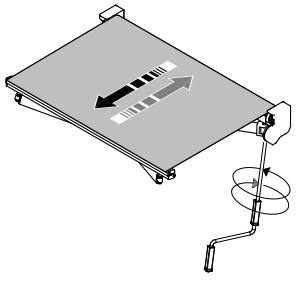
When operating the product, excessive force must not be applied to the operating element if any resistance is encountered.

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

INFO
The awning is fully extended as soon as the safety clutch integrated in the drive activates.

Even when the crank is turned further, the awning will not continue extending.

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.

3.3 Product with additional turning gear

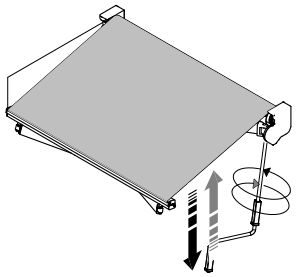
INFO
Turning the crank on the turning gear allows the product's inclination to be adjusted over a range of 5° to 45°. The product only meets the requirements of rain class 2 at an inclination angle of 14° or more (see Chapter 2.5/Page 6).

- ▶ Turning clockwise: product pivots downward
- ▶ Turning anticlockwise: product pivots upward

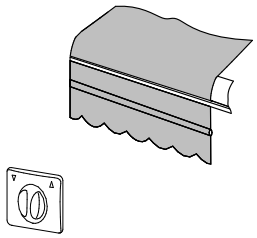
NOTICE
The product can be damaged by incorrect operation.

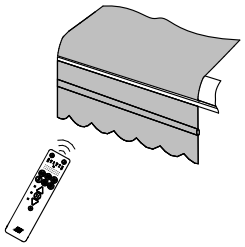
When operating a product with a turning gear (extending/retracting, adjusting the inclination angle), the requirements indicated below must be observed. The product can be damaged if these requirements are not met.

- The product must be extended 500 mm, but no more than 1000 mm, before the inclination angle can be adjusted.
- The inclination angle must be set to between 5° and 30° before the product is retracted.
- Stop operating the unit whenever you feel any resistance.

Inclination angle adjustment with turning gear	
	■ Turn the crank. The product moves in the selected direction.

3.4 Valance roller blind with motor

Movement with basic control	
	■ Operate the switch. The valance moves in the selected direction. Additional information can be found in the separate instructions for the control.

Movement with comfort control	
	■ Brief keystroke: awning moves. ■ Long keystroke: valance roller blind moves. ■ 2 brief keystrokes: awning/valance roller blind move in tandem. Additional information can be found in the separate instructions for the control.

3.5 Valance roller blind with crank

NOTICE
Product damage from forceful operation!

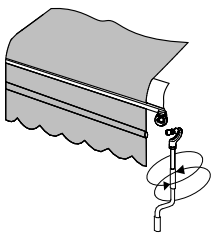
When operating the product, excessive force must not be applied to the operating element if any resistance is encountered.

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

NOTICE
Product damage when the lower limit position is overrun!

The valance roller blind does not have a limit stop in the lower limit position. After the order height is reached, the valance roller blind is raised again in the wrong direction. Raising the blind in the wrong direction causes wrinkles to form, makes retraction impossible and will cause damage.

- After reaching the order height, stop the rotating movement.

Movement	
	■ Turn the crank. The product moves in the selected direction.

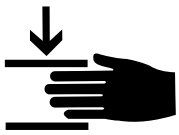
INFO
The valance roller blind is fully raised when no more fabric is visible at the valance outlet.

3.6 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 in stormy weather

	Before bad weather arrives (forecast heavy rain, storm, thunder, hail etc.) or if warnings of bad weather are issued (thunder, storm, hail, extremely heavy rain etc.), the product must be retracted in good time by hand,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. ■ Retract the product if the wind speed limit is exceeded. ■ Before bad weather arrives or if warnings of bad weather are issued (thunder, storm, hail, extremely heavy rain etc.), the product must be retracted by hand immediately. ■ All other movements by the product must be prevented under heightened wind loads.

Operation in wet weather

NOTICE
Deterioration of awning fabric due to moisture!

Moisture promotes wrinkling and waffling.

- Once the rain has stopped, awning fabric that has become wet should be extended so that it can dry.

	The product must be retracted by hand before a bad weather front passes over, even if a control is being used. ■ Before bad weather arrives, retract the product by hand. ■ In the event of rain, retract and do not extend the product. ■ Once the rain has stopped, awning fabric that has become wet should be extended so that it can dry.

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.

	■ Do not retract or extend the product in snow. ■ Do not operate the product if it is frozen. ■ Switch off the automatic control in winter.

Dirt (such as leaves and foreign objects)

	■ Immediately remove leaves and other foreign objects from the awning fabric and box. Leaves and other foreign objects can cause malfunctions and create the conditions necessary for microbial activity.

4 Service

Use of the product in a manner that is not intended or failure to care for and check the product improperly render the product warranty from WAREMA void.

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.

CAUTION
Risk of injury from falling!

There is a risk of falling during maintenance work.

- Take suitable safety precautions to prevent or arrest falls.

INFO
The awning fabric can become electrically charged. Contact with people or objects may result in electrostatic discharge from charged fabric.

4.1 Cleaning, care and inspection activities

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.**

For awning fabrics, the necessary cleaning interval depends on the degree of soiling.

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.

INFO
The activities described in this section can be performed by the operator. It is important to abide by the interval of one year.

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. 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.
- Do not wash the awning fabric in a washing machine or other similar equipment.
- Do not rub the awning fabric excessively with a hard brush/sponge or other hard objects. This may damage the surface.
- Do not retract the awning fabric if it is damp. This may cause moulding or spotting.

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

Using the WAREMA cleaning glove together with WAREMA cleaning agent concentrate for sun shading products is an ideal way to properly clean product surfaces.

The WAREMA cleaning agent for sun shading products can be used for metal and plastic surfaces and is certified by the GRM (Gütegemeinschaft Reinigung von Fassaden e.V.) (certification no. 142, 242, 342, 442, 542).





To order, contact your WAREMA dealer.

For further advice and technical questions regarding cleaning, please contact the Association of German Sun Shading Product Cleaners (Verband Deutscher Sonnenschutzreiniger e.V., www.vds-sonnenschutz.de).

Preparing for cleaning

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

INFO
Cleaning will vary with the fabric quality and the type of coating (e. g. special coating such as aluminium vapour coating). Test the procedure in a less visible area first. If you have any questions, please contact your WAREMA dealer for further information.

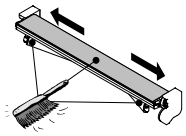
Aids required for cleaning:

- Whisk broom/brush (soft bristles)
- Vacuum cleaner (optional)
- Bucket
- Low-calcium water (recommendation)
- WAREMA cleaning agent for sun shading products (do not use on wood products)
- WAREMA cleaning glove
- Cotton cloth
- Additionally for awning fabric:
  - Rubber eraser (non-marking)
  - Adhesive tape
  - Mild detergent

INFO
Clean step-by-step from the rear to the front.

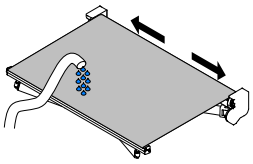
1 Rain hood (if present)
2 Awning fabric (as needed)
3 Articulated arms
4 End rail (valance roller blind if present)
5 Front rail

Performing preliminary cleaning



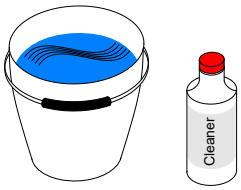
- Remove any loose soiling from the entire product (e. g. dust, leaves). A whisk broom/broom or vacuum cleaner can be used for this.
- Do not forget to clear the opening of the guide for the curtain.

or

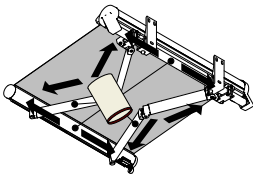


- If the product is installed outside (outdoors), you can also rinse off loose dirt with clear water at a low water pressure.
- Before you start, remove any objects that must not get wet.

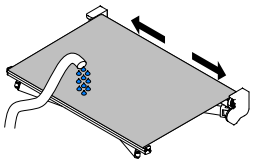
Performing detailed cleaning



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

Cleaning the awning fabric without water

In some cases, smaller spots and isolated dirty streaks can be cleaned without water.

- Dab off/strip away soiling with adhesive tape.

  and/or
- Remove soiling with a non-marking rubber eraser (by applying light pressure).
- Remove soiling with a vacuum cleaner if necessary (on the low setting).

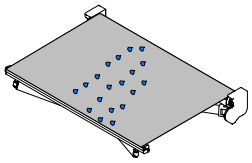
Cleaning the awning fabric with water

Soiling or crusting spread over a large area must only be removed when wet, in order to keep the dirt from being rubbed into the fibres and spaces between the fibres.

- Remove any loose soiling from the awning fabric (do not brush off).
- Wet the awning fabric with clear water at a low water pressure.
- Add a 5-10% mild washing detergent to lukewarm water (max. 40 °C). Build up a lather by squeezing out a sponge several times.
- Apply the lather to the soiled locations and let it soak in for 15-20 minutes.
- Wet the awning fabric with clear water at a low water pressure.
- Repeat the procedure as needed based on the degree of soiling.

Drying the product

- extend the product into the lower limit position.



- Leave awning fabric that has become wet to air-dry.

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.

Re-impregnating the awning fabric

INFO
The cleaning agent and fabric impregnation have opposing effects. By thoroughly rinsing off the cleaning agent with clear water, you can preserve the water-repellent property of the awning fabric for a longer time.

Every time the fabric is cleaned, the original protective function of the awning fabric is slightly diminished. Depending on the fabric type, a reimpregnation can renew the water-repellent effect and is therefore recommended.

Only use impregnating agents that are suitable for fabrics.

Re-impregnation cannot restore the awning fabric to its original new condition.

Inspection activities/examine the product during cleaning

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.

- Check the product regularly for visible wear, damage and proper functioning (visual check).
- Check that the fixing of the supporting elements (e. g. consoles) is firmly connected to the structure (visual check).
- Remove all foreign objects and any dirt from the product components .
- Check the charge status of the batteries of supplementary accessories, such as the hand-held radio transmitter and wind sensor, and replace if necessary.

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**.

4.2 Maintenance

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.

It is recommended to service the product 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.

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.

- 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.
- 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).
- Make sure that the console elements are firmly seated. The consoles/mounting plates must be attached flush against the mounting substructure without any gap.
- Check the articulated arm joint.

INFO
The installation instructions describe how to adjust the centre joint of the articulated arm. Any missing documents should be obtained from the manufacturer by the qualified specialist prior to the start of maintenance.

- Make sure the centre joint of the articulated arm moves smoothly. Adjust the height if necessary.

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.

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.

4.4 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 Wear parts

Wear parts
▶ Wind sensor battery

4.6 What you should know about awning fabrics

Technical fabrics may exhibit certain characteristics due to production and sizing that may appear to the operator to be "faults".

The blemishes described below have no influence on the usability and durability of the awning fabric [excerpt from the Guideline for the Evaluation of Preassembled Awning Fabrics – published by the ITRS Industrieverband Technische Textilien Rollladen - Sonnenschutz e. V.]:

Wrinkles and folding lines

Wrinkles can be produced when the fabric is assembled (cut and sewn) and when it is folded. Surface effects (shifts in pigmentation) can occur in the wrinkles. When viewed against the light, these resemble dirty marks (especially on light-coloured fabric).

Chalk lines

These are light stripes of the impregnating material on the fabric surface. They result from handling the fabric during production and assembly of the units. Although the fabric is handled with special care, these effects cannot be fully avoided in dark fabrics.

Waviness in the seams and fabric panels

As the fabric is wound onto and off of the shaft, it is tightened more at the hems, seams and panels than between the seams. The resulting tension in the fabric can lead to waviness (e. g. waffle or fishbone patterns) that "digs" into the fabric. The waves are visible when the unit is open.

Waffling

Because of the production method, waffling may form under certain weather conditions and in certain fabric sizes. This effect is more visible in unfavourable lighting conditions. The formation of waffling is accelerated and enhanced through wetness (humidity, rain). If a fabric that has been "softened" in this way is retracted, waffling and wrinkles can become particularly pronounced.

Weave flaws

Spinning of the yarns as well as warping in the weaving mill and the weaving process itself is executed under tension. The yarn may break. This will lead to knots. Irregular thread thicknesses are seen as light areas or burls in the fabric.

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 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.	
	A higher-level control command is present	Wait for on/off delay and then try again.	
	No voltage is applied.	Check the power supply.	Have checked by a certified electrician.
	Motor is faulty	Replace the motor.	Replacement by a qualified specialist

Fault: the product does not move to the desired limit position			
	Cause	**Remedy**	**Note**
	The motor limit positions are incorrect	Readjust the motor.	Adjustment by a qualified specialist

Fault: the crank cannot be turned			
	Cause	**Remedy**	**Note**
	The gear is faulty.	Replace the gear.	Replacement by qualified specialist.

Fault: the fabric winds unevenly			
	Cause	**Remedy**	**Note**
	The articulated arms do not retract simultaneously.	Retract the awning and observe which articulated arm retracts first. Shift the fabric on the shaft in the direction of the articulated arm that retracts first.	Qualified specialist only. ▶ Right articulated arm retracts first → Fabric winds to the left ▶ Left articulated arm retracts first → Fabric winds to the right

Fault: centre joints have different heights when retracted (an offset of 15 mm is permissible)			
	Cause	**Remedy**	**Note**
	The centre joint settings are different.	Adjust the centre joint height (see installation instructions).	Adjustment by qualified specialist

7 Declaration of Conformity

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

The product:

WAREMA articulated arm awning Terrea

Type:
- G60
- H60

Purpose: External textile sun shading system

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

Machinery Directive 2006/42/EC:

EN 13561	External blinds and awnings - 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.

Directive on radio equipment 2014/53/EU (RED):
Use for motor drives with an integrated radio receiver or for WAREMA components with 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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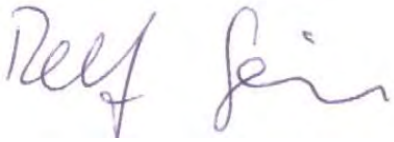



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Marktheidenfeld, Germany, March 2023