

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

WAREMA fabric roof Lamaxa L50 Tex

Operating and maintenance instructions

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 signal words.....	3
1.4	Basic safety instructions.....	3
2	Product information.....	7
2.1	Intended use.....	7
2.2	Parts description.....	9
2.3	Electrical data.....	9
2.4	Wind resistance Roof system.....	11
2.5	Resistance of roof system to collecting water.....	11
2.6	Wind resistance Awning with easyZIP guidance in which the roof system (optional) is not installed at ground level.....	11
2.7	Declaration of performance.....	12
3	Operation.....	13
3.1	Product with motor.....	13
3.2	Operating the LED strip with the WMS Hand-held transmitter.....	14
3.3	Operating the RGB strip.....	14
3.4	Operating the radiant heater with the WMS Hand-held transmitter (if available).....	14
3.5	Incorrect operation.....	16
4	Service.....	21
4.1	Cleaning, care and inspection activities.....	22
4.2	Maintenance.....	28
4.3	Repair.....	29
4.4	What you should know about awning fabrics.....	29
5	Dismantling/disposal.....	31
6	Troubleshooting.....	32
7	Declaration of Conformity.....	33

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: Lamaxa fabric roof L50 Tex

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 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.

Introduction

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. 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 (forecast heavy rain, storm, thunder, hail etc.) or if warnings of bad weather are issued (thunder, storm, hail, extremely heavy rain etc.), 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. Strong gusts of wind activate the control, but the product does not retract because the motor is stopped by the torque that is produced.

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

Operation in wet weather

Lamaxa L50 Tex sun shading system variant

The Lamaxa L50 Tex sun shading system variant is mounted without the inclination angle. The awning is not permitted to be extended in rain. 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.

Lamaxa L50 Tex WeatherEdition variant

The Lamaxa L50 Tex WeatherEdition variant is installed without the inclination angle. The product is equipped with an integrated drainage system through the travelling rain gutter and the lateral frame profiles. The product can only be used in the rain if it is fully extended. The variant is designed for normal rainfall (not including forecast/extremely heavy rain, hail etc.) and therefore provides protection from the rain.

If the product is only partially extended, the rain may cause water pockets to form. This may damage the awning and can pose a risk to people.

- ▶ If it starts to rain, do not leave the awning fabric partially extended. The awning must either be fully extended, provided the rainfall is normal (not including forecast/extremely heavy rain, hail etc.), or fully retracted.
- ▶ If there are large amounts of precipitation, e.g. very heavy rain or hail, the awning must be retracted.

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.
- ▶ Before operating the product, the grooves of the guide rails should be freed of snow and ice so that the product can move freely.
- ▶ 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.

Roof avalanches from nearby buildings may damage the fabric roof.

Heavy snowfall and sleet are possible in winter. As temperatures rise, accumulated snow may slide off of unprotected areas (e. g. house roof) and drop down onto the fabric roof. This may damage the fabric roof.

- ▶ If falling snow cannot be prevented entirely, suitable measures must be taken to stop the snow from falling in an uncontrolled manner.
- ▶ It is recommended to install snow bars in the area of the fabric roof or to install snow guards along the entire roof.

Duty of supervision when not installed at ground level

If the installation location of the roof system is on a balcony or a roof terrace, for example, special precautions must be taken for the GranTex with easyZIP guidance (if present) regarding the wind to ensure the safety of persons. The GranTex with easyZIP guidance is only able to withstand the loads associated with the specified wind speed limits ([see Tab. 6](#)).

- ▶ The table with the wind speed limits for installation locations that are not at ground level must be noted. The wind speed limits differ from the values in the product-specific operating and maintenance instructions.
- ▶ If persons will not be present, raise the GranTex with easyZIP guidance.
- ▶ The WMS Plus weather station with a mains supply is in use with the Lamaxa.
- ▶ The wind sensor is installed at a wind-exposed location. The installation location has an influence on the triggering behaviour of the control/weather station.
- ▶ Lowering of the GranTex with easyZIP guidance must be interrupted immediately if responsive obstacle detection of the drive is activated during a movement. The product must be raised and is not permitted to be lowered again until the wind settles down.
- ▶ If the GranTex with easyZIP guidance was lowered in wind, it must be ensured that the zipper of the fabric is properly positioned in the guide element. If a fault has occurred in which the zipper has slipped out, raise the product. After the wind has settled down, lower the product multiple times and check if the fault is still present or not. If the fault is still present despite multiple attempts to eliminate it, contact a specialised retailer to correct the problem. Do not operate the product in the meantime.
- ▶ If a weather station is mounted, the automatic extension feature (sun-based or time-based automatic function) for the GranTex with easyZIP guidance must be switched off.

Obligation to supervise operation of the radiant heater (if present)

If the product is not monitored during operation, objects may be damaged. Heat generation and the failure to maintain minimum distances can scorch surfaces and cause fires.

- ▶ Never leave the radiant heater unattended during operation.
- ▶ The radiant heater should not be equipped and operated with a time switch or any other device that automatically switches the heater on.

Operating note for radiant heater (if present)

The radiant heater becomes hot when it is switched on. Inappropriate conduct can create a burn hazard and/or cause the product to overheat.

- ▶ Do not touch the radiant heater during operation. The radiant heater is hot.
- ▶ Do not place objects on top of the radiant heater, and do not cover the radiant heater with textiles. There is a risk of fire.
- ▶ Do not touch the radiant heater immediately after it was operated. Wait for the radiant heater to cool down before touching it.

Access to the radiant heater (if present)

The radiant heater is not intended for children. Children are unable to recognize the danger posed by the product. Personal injury may occur as a result of careless use.

- ▶ Children must be monitored while the radiant heater is switched on.

Notes on use, LED strips/RGB strips (if present)

Risk of eye injury from incorrect use of LED strips/RGB strips!

- ▶ The LED strips/RGB strips produces a dim light. The maximum brightness is not sufficient for reading.

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 cover panel and awning fabric.
- ▶ Remove leaves and other foreign objects from the guide rails.

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.

Freezing of drainage channels in winter

In winter, snowfall may occur. Heat from the sun will begin to melt the snow. In cold and shady areas, melt water will refreeze. Down pipes may freeze and burst open.

- In locations that frequently experience icy conditions, the installation of an antifreeze device (e. g. gutter heating) is recommended in gutters and/or pipes.

soiled drainage

Gutters may clog with leaves, moss and dirt. This may cause the gutters to overflow when it rains.

- Gutters without or with an insufficient gradient must be inspected and cleaned more frequently.

2 Product information

2.1 Intended use

The following details apply to the following product: Lamaxa fabric roof L50 Tex

Information on Lamaxa L50 Tex sun shading variant

The roof system features a travelling awning fabric that is used as an external sun protection system.

This variant does not offer rain protection.

The product is used to shade residential and commercial areas.

Information on Lamaxa L50 Tex WeatherEdition variant

The roof system features a movable awning fabric and water drain system that is used as an external sun shading system (thermal protection and glare control) and a fully extended awning fabric that provides protection against the rain. The product is equipped with an integrated drainage system through the travelling rain gutter and the lateral frame profiles.

This product variant is designed for normal rainfall (not including forecast/extremely heavy rain, hail etc.) and therefore provides protection against the rain.

The product is an awning in the form of an open pergola and therefore is not fully water-proof or splash-proof. Depending on the weather (wind, rain), water may splash or drip on the fully extended fabric in the area of the drainage cutouts close the central rain gutter.

In addition, spray and splash water occur when moving the wet awning, depending on the weather

The product is used to shade residential and commercial areas.

The Lamaxa L50 Tex WeatherEdition variant is only approved for performance class 2 (precipitation quantity 56 l/m² per hour) with the awning fabric fully extended ([see Chapter 2.5/Page 11](#)).

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.

Product information

Optional:

GranTex with easyZIP guidance

The product is an external sun shading system that is used for thermal protection, glare control and visual privacy on a carrier product e.g. Lamaxa fabric roof. The product reduces the incidence of light and optimises the use of solar energy.

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

The information about this product can be found in the accompanying product-specific operating and maintenance instructions. If any values differ from those in the product-specific operating and maintenance instructions, they are given in these instructions.

Optionally:

LED strips

The product consists of an electronic LED lighting device (warm white light) for outdoor installation. In the Lamaxa fabric roof, the power supply of the LED strips is provided via the WMS Dimmer smart.

Optionally:

RGB strips

The product consists of an electronic lighting device with RGB LEDs for outdoor installation. In the Lamaxa fabric roof, the power supply of the RGB LED strips is provided via the RGB ZigBee dimmer.

Optionally:

Radiant heater

The product is designed to generate radiant heat outdoors.

The product is connected to a mains voltage of 230 V/50 Hz via the WMS Plug receiver power.

Optionally:

WMS Weather station plus

The product enables the wireless control of sun shading product and is equipped with a sensor for brightness, precipitation, temperature and wind speed. The weather station may be connected to a mains voltage of 230 V/50 Hz and must be set to the value specified for the product.

2.2 Parts description

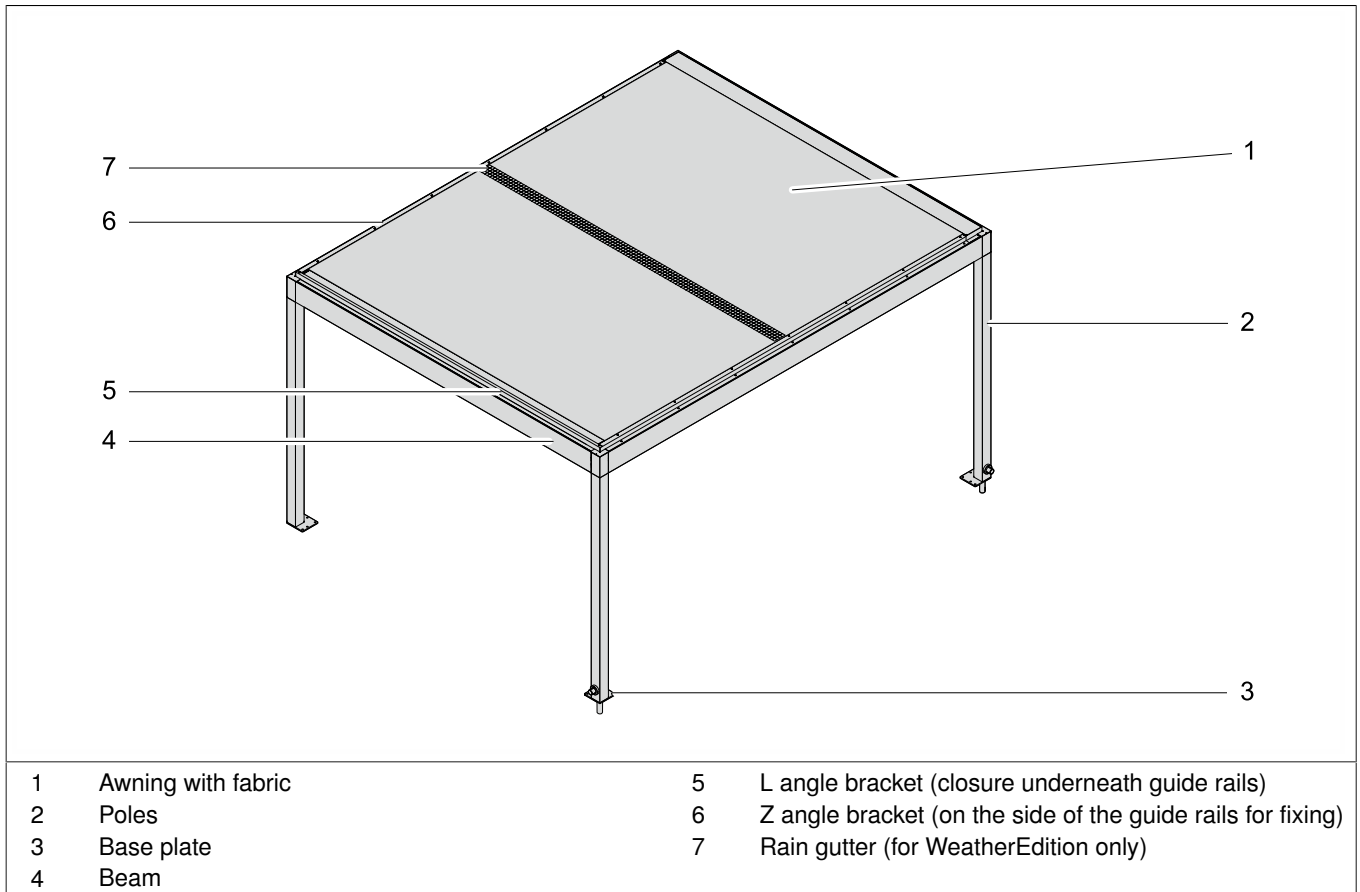


Fig. 1: Parts description for Lamaxa L50 Tex fabric roof

2.3 Electrical data

Data for fabric roof

Parameter	Value
Current consumption [A]	0.75-1.4
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.

Data for LED strips (if present)

Parameter	Value
Operating voltage [V DC]	24
Degree of protection	IP67
max. power	400 lm/m, 4.8 W/m
Colour temperature [Kelvin]	3000

Tab. 1: Technical data of LED strip

Product information

Data for WMS Dimmer smart (if present)

Parameter	WMS Dimmer smart
Operating voltage [V AC]	200-240
Frequency [Hz]	50-60
Load current [A] at 230 V AC	6.0
Operating voltage [V DC]	24
Switching capacity [W] at 24 V DC with WMS Dimmer smart 60 L (art. no. 2023455)	55
Switching capacity [W] at 24 V DC with WMS Dimmer smart 100 L (art. no. 2023456)	95
Switching capacity [W] at 24 V DC with WMS Dimmer smart 200 L (art. no. 2023457)	150
Degree of protection	IP 54
Safety class	I
Operating and storage temperature [°C]	-20 to +55

Tab. 2: Data for WMS Dimmer smart

Data for RGB strips (if present)

Parameter	Value
Operating voltage [V DC]	24
Degree of protection	IP 54
max. power	12 W/m

Data for ZigBee RGB Dimmer smart (if present)

Parameter	ZigBee RGB Dimmer smart 150 W
Operating voltage [V AC]	200-240
Frequency [Hz]	50-60
Operating voltage [V DC]	24
Switching capacity [W] at 24 V DC with ZigBee RGB Dimmer smart 150 W (art. no. 2031738)	145
Degree of protection	IP 54
Safety class	I
Operating and storage temperature [°C]	-20 to +55

Tab. 3: Data for ZigBee RGB Dimmer smart 150 W

Data for radiant heater (if present)

Design radiant heater (optionally dimmable)



INFO

For the radiant heater, an in-line circuit breaker with type C16 is **mandatory**.

Parameter	Value
Mains voltage	230–240 V AC/50 Hz
Power consumption [W]	2200
Degree of protection	IP 65
Safety class	I
Dimensions LxWxH [mm]	900x170x80

Tab. 4: Technical data of the Design radiant heater

Data for WMS Dimmer 0-10 V (if present)

Parameter	WMS Dimmer 0-10 V
Operating voltage [V DC]	12
Power consumption [W]	0.2
Frequency [GHz]	2.40-2.48
Degree of protection	IP54
Safety class	III
Operating and storage temperature [°C]	-20 to +55

Tab. 5: Data for WMS Dimmer 0-10 V (if present)

2.4 Wind resistance Roof system

The product has the following resistance to wind loads: class 4 ¹

The declared performance only applies to the product itself.



The maximum permitted wind speed (wind speed limit) for the product when it is extended is: 13 m/s (Beaufort 6)

Wind speed 13 m/s is defined as a strong wind in which thick branches sway, umbrellas are difficult to control and telegraph cables howl in the wind.

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 of roof system to collecting water

The Lamaxa L50 Text WeatherEdition variant fulfils performance class 2.

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

The performance class is only reached if completely closed.

Drainage can only be ensured if the awning fabric is fully extended and the mesh in the awning fabric and the awning fabric itself are kept free of soiling.

2.6 Wind resistance Awning with easyZIP guidance in which the roof system (optional) is not installed at ground level**INFO**

The following wind speed limits ([see Tab. 6](#)) must be applied if the roof system is **not installed at ground level**.

If **installed at ground level**, the wind speed limits in the additionally included operating and maintenance instructions must be abided by.



The product achieves the following resistance to wind loads: class 3

Product information



INFO

Due to their design, awnings with easyZIP guidance are able to withstand much higher wind speeds when extended than while they are extending.

The supplied product features a new motor with a responsive obstacle detection mechanism. The motor is capable of detecting an excessive wind load while the product is being lowered, which means that the product is stopped temporarily while it is moving.

Basis of the following table (for motor with obstacle detection):

- Raising the awning
- Installation:

Installation on Lamaxas not at ground level

Width in [mm]	Order height in [mm]				
	up to 1000	up to 1500	up to 2000	up to 2500	up to 3000
up to 1000	21	21	21	17	17
up to 1500	21	21	17	13	13
up to 2000	21	17	13	13	10
up to 2500	17	13	13	10	10
up to 3000	17	13	10	10	10
up to 3500	17	13	10	10	10
up to 4000	17	13	10	10	10
up to 4500	17	13	10	10	10
up to 5000	17	13	10	10	10
up to 5500	13	13	10	10	10
up to 6000	13	13	10	10	7

Tab. 6: Wind speed limits for awnings with easyZIP guidance in which the roof system (optional) is not installed at ground level (details in m/s)

2.7 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.

3.1 Product with motor

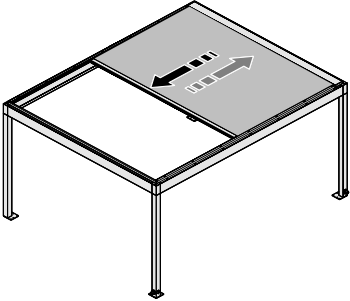


CAUTION

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	
	<ul style="list-style-type: none"> ■ 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.

Water drainage can only be ensured when the awning is fully extended.

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 Operating the LED strip with the WMS Hand-held transmitter



INFO

Select the right channel for the product on the hand-held transmitter.

The exact description of the hand-held transmitter can be found in the accompanying instructions for the hand-held transmitter.

Operating the light	Switching on/ dimming ¹	 Press the UP button briefly .	→	 Light goes on or becomes brighter
	Dimming ¹	 Press the DOWN button briefly .	→	 The light goes on or becomes dimmer
	Switching off	 Press the STOP button briefly.	→	 The light goes off.

¹ The LED strip/RGB strip is switched on with the brightness value last used.

3.3 Operating the RGB strip



INFO

Operate the RGB strips with the Philips Hue app or a separate RGB hand-held transmitter.

The exact description of the hand-held transmitter can be found in the accompanying instructions for the hand-held transmitter.

3.4 Operating the radiant heater with the WMS Hand-held transmitter (if available)



CAUTION

Risk of burns on hot surfaces!

The surfaces of the product are a burn hazard while the product is in use and after it has been switched off.

- Wait for the radiant heater to cool down before touching it.




INFO

Select the right channel for the product on the hand-held transmitter.

The exact description of the hand-held transmitter can be found in the accompanying instructions for the hand-held transmitter.

without dimmer function

Operating the radiant heater	Switch on	 Press the UP button briefly .	➔	 The radiant heater is switched on.
	Switch off	 Press the DOWN button briefly .	➔	 The radiant heater is switched off.

with dimmer function



INFO

The WMS dimmer 0-10 V changes the power of the connected radiant heater in 3 dimming levels.

OFF	Level 1	Level 2	Level 3
0%	33%	66%	100%

Tab. 7: Radiant heater power at each dimming level

The WMS dimmer 0-10 V switches the radiant heater power to 0% by default after 4 hours. The 4 hours restart every time the unit is operated. This value can be changed to between 1 and 7 hours on WMS studio pro or homee.


Operating the radiant heater	Switch on at dimming level 1	Press the UP button briefly.	→	The radiant heater is switched on at dimming level 1.
	Switch on at dimming level 3	Press and hold the UP button.	→	The radiant heater is switched on at dimming level 3.
	Increase the dimming levels	Press the UP button briefly.	→	The dimming level is increased.
	Decrease the dimming levels	Press the DOWN button briefly.	→	The dimming level is decreased.
	Switch off	Press and hold the DOWN button.	→	The radiant heater is switched off.
		Press the stop button briefly or for a longer period.	→	The radiant heater is switched off.

3.5 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

	<ul style="list-style-type: none"> ■ While the product is moving, keep persons away from the product. ■ While the product is moving, do not reach between the moving parts. <p>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.</p>
---	---

Operation in stormy weather (roof system)

	<p>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, even if a control is normally 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. Strong gusts of wind activate the control, but the product does not retract because the motor is stopped by the torque that is produced.</p> <ul style="list-style-type: none"> ■ Retract the product if the wind speed limit is exceeded. ■ 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 by hand immediately. ■ All other movements by the product must be prevented under heightened wind loads.
---	---

Operation in windy weather (installation location not at ground level)

awning with easyZIP guidance:



If the installation location of the roof system is not at ground level, special precautions must be taken for the awning with easyZip guidance to ensure that people remain safe when it is windy.

- The product must only be operated in conjunction with the WMS Plus weather station with a mains supply.
- The wind sensor must be attached to the roof system/.
- Before bad weather arrives, the product must be raised by hand.
- The product must be raised if the wind speed limit is exceeded.
- The product must not be lowered automatically using a control.
- The product must be raised if you are going to be away.
- If the responsive obstacle detection feature of the drive is activated while the product is moving downwards, the movement must be stopped and the product must be raised. The product should only be lowered again when the wind has died down.
- If the product was lowered in windy weather, it is important to check whether the zipper in the fabric is properly positioned in the guide element. If a fault has occurred and the zipper has slipped out, raise the product. After the wind has died down, lower the product several times and check whether or not the fault is still present. If the fault is still present despite several attempts to rectify it, contact a specialised retailer to correct the problem. Do not operate the product in the meantime.

Operation in wet weather

Applies to Lamaxa L50 Tex variant sun shading system.



NOTICE

Product damage from incorrect operation in rain!

If the awning is not retracted in rain, water can collect in the fabric. Should it then become necessary to retract the awning (e.g. if the weather turns windy), the increased torque will not allow the awning to be retracted, and the product may become damaged.

- Retract the awning at the first signs of rain.
- Connect the awning to a control unit with precipitation monitoring.

Applies to Lamaxa L50 Tex variant WeatherEdition.



INFO

Water drainage can only be ensured when the awning is fully extended.

The wind may cause the awning fabric to flap. This may lead the water that is draining away to bypass the drainage gutter. Depending on the weather (wind, rain), water may splash or drip on the fully extended fabric in the area of the drainage cutouts close the central rain gutter.

When retracting the awning after or during rain, a large amount of water may gush through the mesh and over the front rail of the awning.

Applies to Lamaxa L50 Tex variant sun shading system.



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. Sudden driving rain can cause water to collect in the awning fabric while the control is actuated. The motor will be stopped due to the torque that is produced, and the product will not retract.

- Before bad weather arrives, retract the product by hand.
- In the event of rain, retract or do not extend the product.
- Once the rain has stopped, extend the wet awning fabric to allow it to dry.

Operation

Applies to Lamaxa L50 Tex variant WeatherEdition.

The Lamaxa L50 Tex WeatherEdition variant can withstand normal rainfall (not including forecast/extremely heavy rain, hail etc.) only if the awning fabric is fully extended. If there are large amounts of precipitation, e.g. very heavy rain or hail, the awning must be retracted.

	<ul style="list-style-type: none">■ If it starts to rain, do not leave the awning fabric partially extended.■ Retract the product if the rain will be heavier than normal.
	<ul style="list-style-type: none">■ Retract or do not extend the product in the event of hail.

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.

	<ul style="list-style-type: none">■ 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)

	<ul style="list-style-type: none">■ Immediately remove leaves and other foreign objects from the awning fabric and box. <p>Leaves and other foreign objects can cause malfunctions and create the conditions necessary for microbial activity.</p>
---	--

Cleaning the drainage



INFO

If the drainage gutter is installed without an inclination, it must be inspected and cleaned more frequently.

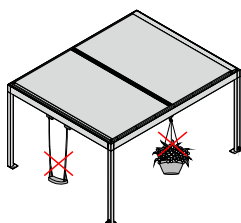
Drainage gutters and drains may clog with leaves, moss and dirt. This may cause the drainage gutters to overflow when it rains. If there are trees in the vicinity, it is better to clean the gutter after all of the leaves have fallen.

In autumn, leaves may have to be removed more frequently, depending on the location and position.



- Clean out any old leaves and dirt that may have collected in the drainage (drainage gutter and downpipe).

Additional load on the product



- Do not attach objects to the product (such as hanging flower pots, swings, hammocks, etc.).

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.

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).

Concentrate



Cleaning glove



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

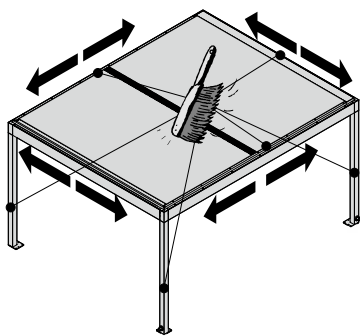


INFO

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

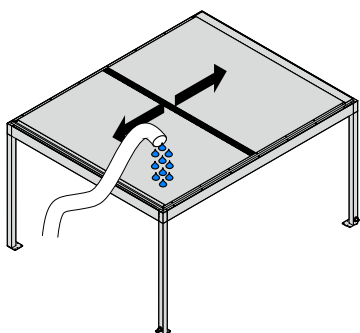
- 1 Cover panel (visible surfaces)
- 2 Rain hood (if present)
- 3 Beams
- 4 Awning fabric (as needed)
- 5 Front rail
- 6 Drainage gutter

Performing preliminary cleaning



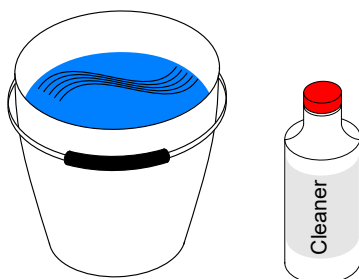
- Remove any loose soiling from the entire product (e. g. dust, leaves). A whisk broom/broom or vacuum cleaner can be used for this.
- Do not forget to clear the opening of the guide for the curtain.

or

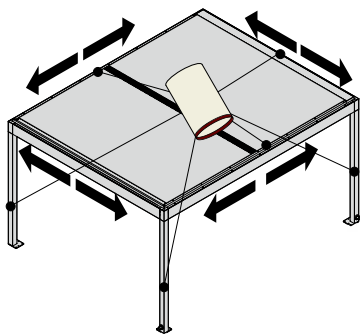


- If the product is installed outside (outdoors), you can also rinse off loose dirt with clear water at a low water pressure.
- Before you start, remove any objects that must not get wet.

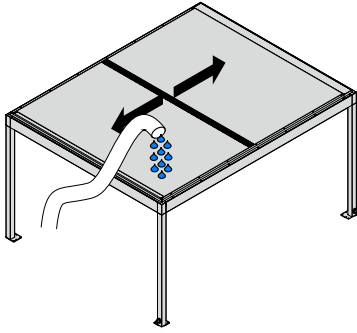
Performing detailed cleaning



- 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.
- Clean the drainage gutters and drainage pipes to remove any blockages, e. g. due to leaves.



- 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).

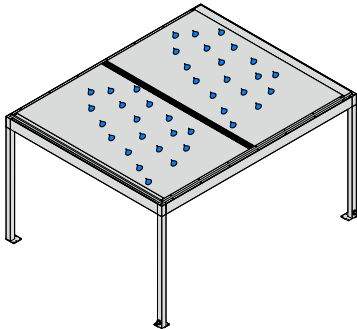
Cleaning the awning fabric with water

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.

Cleaning the drain



INFO

If the drainage gutter is installed without an inclination, it must be inspected and cleaned more frequently.

Drainage gutters and drains may clog with leaves, moss and dirt. This may cause the drainage gutters to overflow when it rains. If there are trees in the vicinity, it is better to clean the gutter after all of the leaves have fallen.

In autumn, leaves may have to be removed more frequently, depending on the location and position.



- Clear leaves and soiling out of drainage gutters, the drop tube and the outlets.

Cleaning the radiant heater (if present)



NOTICE

Product damage from incorrect procedure!

Fingerprints on the heating element may shorten the product service life.

- Do not touch the heating element of the radiant heater with bare hands.

- Remove dust from the surfaces using a soft brush or a feather duster.
- Wipe off the heating surface of the Design radiant heater with the moistened cleaning glove.
- Remove the safety grille to clean the reflector on the Basic radiant heater.
- Wipe off the reflector with a soft, lint-free cloth on the Basic radiant heater.

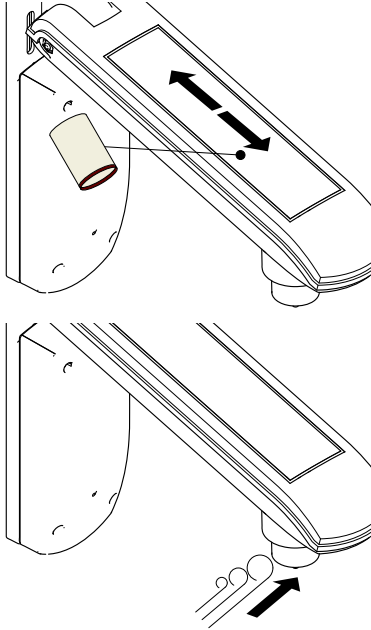
Cleaning the weather station (if available)



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 damp cleaning glove for this purpose.

- Blow out the opening for the wind measurement. Do not introduce pointed objects.

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).
- Remove all foreign objects and any dirt from the product components and the guide rails.
- Check the charge status of the batteries of supplementary accessories, such as the hand-held radio transmitter and wind sensor, and replace if necessary.
- Check the drainage gutters, drop tubes and outlets for clogging and clean.
- When operating the product, check whether unusual noises can be heard from the cover panel.



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).
- Check the counter bearing, bell mouth and slider where the guide rail meets the cover panel.

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 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 Preamsembled 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.	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.

Fault: The product does not move to the required limit position.			
	Cause	Remedy	Note
	The motor limit positions are incorrect.	Readjust the motor.	Have the adjustment carried out by a specialist firm.

Fault: The front rail does not move to the lower limit position.			
	Cause	Remedy	Note
	The guide rails are soiled.	Remove soiling.	

Fault: The front rail is skewed.			
	Cause	Remedy	Note
	A gear wheel was skipped over.	Loosen a gear wheel and take it out of the toothing of the perforated metal band. Align the front rail so it is parallel to the cover panel. Insert the gear wheel and screw it tight.	Have the repair carried out by a specialist firm.

7 Declaration of Conformity

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

The product:

WAREMA fabric roof Lamaxa

Type:

– L50 Tex

Purpose:

Patio roof

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:

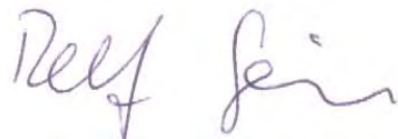
Directive on radio equipment 2014/53/EU (RED):

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:

WAREMA Renkhoff SE
Hans-Wilhelm-Renkhoff-Str. 2
97828 Marktheidenfeld
Germany



Ralf Simon

Executive Director Research and Development



Elke Granzer

Technical Support R & D

Marktheidenfeld, Germany, March 2023

WAREMA Renkhoff SE
Hans-Wilhelm-Renkhoff-Straße 2
97828 Marktheidenfeld
Germany

