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Important advice!




Manufacturing number

Every markilux awning was produced individually according to your guidelines and has a fabrication number on it, through which this product becomes a unique product identifiable at any time.

Reading of "Important Instructions" and the "Operating Instructions"

The instructions handed by the authorized markilux specialist must be read before the first awning use. It is important to read all instructions for the safety of persons. All instructions are to be stored by the customer and have to be handed over to the new owner in case of an eventual transfer of the awning to Third Parties.

Explanation of the signal words

-  **DANGER**
Marks an imminent danger that leads to death or serious injuries.
-  **ATTENTION**
Marks important information that must be taken into account.
-  **WARNING**
Marks a possible potential risk from **current**, that can lead to death or serious injuries.

Proper use of an awning



The awning is a sun protection construction. Improper use may lead to significant hazards.

If the awning inclination is less than 25% = 14° measured at the horizontal or the awning is not extended entirely, then it must not be burdened by rainwater. If this is the case, there is a risk of the formation of water pockets in the awning cover and the awning may become damaged or even detached from the wall.

Alterations like rebuilding or enlargements which are not intended by the manufacturer may only be carried out with the markilux manufacturers written approval. Additional awning burdens by means of object attachments or rope wearing can result in damage or dropping of the awning and are therefore not allowed.

Wind resistance class

Wind resistance class	1	2	3
Wind speed maximum value in km/h	28	38	49
Wind speed maximum value in m/s	7.8	10.6	13.6

Wind resistance class 1 or 2

markilux 1600 (depending on size), 1700 (depending on size)
1300 (depending on size), 5010 (depending on size)

wind resistance class 2

markilux 6000, 3300, 970, 990, 930, 1710, MX-1 compact, MX-2, MX-3, MX-4
710, 730, 740, 893, 8850

Wind resistance class 2 or 3

markilux 625 tracfix (depending on size), 776/876 (depending on size),
779 / 879 (depending on size)

wind resistance class 3


markilux 620 tracfix, 770 / 870, 7800 / 8800

The awning meets the requirements of the above stated wind resistance class.

Explanation see "Handover certificate from the specialist dealer". The CE indicates that correspondence with the requirements of the applicable European directives is proven. The corresponding declarations of performance and EU declarations of conformity can be requested through the markilux specialist dealer.

Use in case of snow, ice, thunderstorm, storm and absence, also with automatic control



 The awning must not be extended at snowfall or risk of frost. There is risk of the awning to be damaged or crash down. When a storm or bad weather front is approaching, severe gusts of wind can occur suddenly to which even an automatic control mechanism cannot react with sufficient speed. An automatic control enhances the awning comfort, but does not excuse from the duty of care! During absence for longer periods, e.g. holidays or during the night, an automatic control system does not guarantee an enduringly faultless operation of your awning.



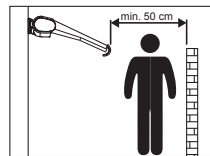
Before the onset of freezing moisture, when a storm, bad weather or a downpour is approaching or when you are away it is important to retract the awning in due time. Any possible existing automatic function must be deactivated.


Leaves, snow and foreign bodies




Foliage and other foreign objects located on the awning cover, inside the awning box and in the guidance bars are to remove immediately. There is risk of the awning to be damaged or crash down. Snow accumulation behind the awning must be avoided by installing a snow guard (snow fence or similar) or by regularly removing the snow load.

Obstacles

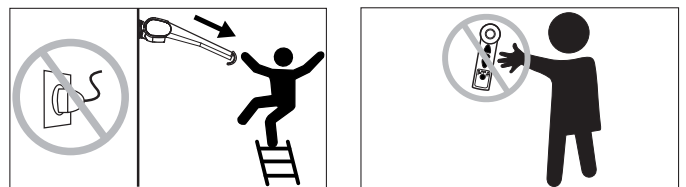



 There must be no obstacles in the extension area of the awning. There is danger for persons to be squashed in there. In order to avoid this, a safety distance of at least 50 cm has to be observed.

Motor in the event of a power-cut


 A motor-driven awning cannot be retracted without electricity. In very windy areas with frequent power cuts the use of an emergency power supply should be considered. Otherwise always retract the awning if the power is scheduled to be cut!

Uncontrolled operation during cleaning and maintenance jobs



 When working in operation radius (e.g. cleaning or service works), make sure the awning to be currentless (e.g. power switch off, remove plug coupling at motor cable, ...). There is a risk of crushing body parts and falling. For works on manually operated units the crank should be removed and stored safely. If awnings are operated by various persons, a locking device switching of prime importance (controlled circuit breakers from outside) must be actuated, so that every awning retraction and extension is made impossible. Persons not familiar with proper awning use must not operate them.

Repair and spare parts

 The awning is to check regularly for signs of wear or damage at covering, frame and its fixtures (with electric connection: also the power supply lines). The durability of the fixtures should be checked on an annual basis by means of a visual inspection or by an annual servicing of the markilux specialist dealer. If damages occur, an authorised markilux specialist dealer is to be entrusted with the adjustment. Only spare parts released by the manufacturer may be used.



Please never try to repair malfunctions on your own! Awnings which need to be fixed must not be used. Talk to your authorized markilux specialist about a preventive maintenance agreement!

windlock mechanism

The awning must be extended at least 1 m for the windlock mechanism device to be effective. The declared wind resistance class only applies to a fully extended awning.

Protection against overheating

Multiple extension and retraction of the awning in rapid succession results in an automatic motor switch-off to preserve it from overheating. After cooling down the motor switches itself on again in operating readiness.

Crushing and shearing zones

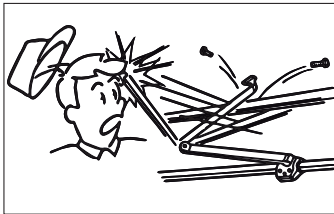


! Depending on the type of awning there are crush and shear zones, e.g. between front profile and cassette and between moving parts. Items of clothing or limbs can be grabbed by the unit and pulled in. If the awning is assembled at a height less than 2,5 metres above accessible traffic ways, then the awning may only be actuated by a pushbutton switch which allows viewing the moving parts. Electric controls, radio-controlled motors with click in-switches are not permitted for such installations.

Metallic and pearl glimmer coatings of the awning frame

The look of plastic coatings of metal and plastic parts in metallic and/or pearl glimmer colour vary. These visual differences concern in particular the intensity and characteristic of the metallic effect, which may also lead to a change in the perception of the basic shade.

Disassembly and disposal



! When disassembling and disposing of the shading system, the parts under tension (e.g. folding-arms, counter tension systems or servo gear unit) have to be relaxed completely or secured beforehand. A markilux specialist should be commissioned for this!

Maintenance and care, characteristics cover and awning frame

Whether a cleansing is necessary or not depends strongly on environmental influences (traffic, air pollution, industrial gases etc.). Depending on the degree of pollution, a regular cleansing is recommended.

i Always use an appropriate ascending aid and never rest against the awning or hold on to it!

Deflexion of the awning frameFlexing of the awning frame

The profile of the wider systems' awning frame can flex as well because of own weight. This occurrence does not influence the awning function and running qualities.

Awning cover in wet condition

i If possible, retract the awning only when it is dry! If the awning must be retracted wet, it has to be extended as soon as possible in order to dry. By the cover permanent weight, a deflection is possible which increases in wet condition. This occurrence does not influence the awning function and running qualities.

Cleaning the awning frame

i For cleaning of the awning frame, use commercial detergent for sensitive surfaces (pH-value between 5 and 8). Aggressive acids and scraping materials (like grinding fleece, emery, sand, pumice, etc.) are not allowed because they could alter the surface totally.

Cleaning the awning cover

i The awning cover is equipped with special impregnation which reduces at every cleansing. For post-impregnation, commercial tent impregnation can be used. By re-impregnation, no new condition of the cover can be achieved yet. Remove dust periodically with a soft brush in dry condition. Remove leaves, twigs and similar debris immediately. Remove small stains on the awning cover with commercial, preferably liquid mild detergent added to water (water temperature approx. 30°C, soap solution 5 %). Rinse thoroughly with water until all traces of the detergent have been removed.

Characteristics resulting from the production and manufacture of awning fabrics

i Awning covers are industrially manufactured textile products which serve both a functional and a decorative purpose. Although only first-class, quality controlled fabric is used in production, there are limits to the degree of perfection that can be achieved. Awning owners occasionally complain about certain imperfections in the fabric due to lack of knowledge. Defects actually to complain are only those which influence the cover life span. The following specified imperfections influence the awning cover durability and usage practicality in no way.

• Dogleg and wrinkle creases

At processing, like e.g. trimming, sewing and winding up of the cover onto the awning frame, dogleg traces can result which can not be avoided. Viewed against the light, the user of the awning has the impression that he sees dark stripes.

• Winding folds / waviness

Winding folds/rippling: This occurs due to the permanent coiling and uncoiling of the cover on the roller. This effect can be explained by the fact, that the material is thicker close to the seams, coils more loosely between the seams of the cover. This effect can occur both directly next to the seam as well as also in the middle of web.

• Chalk and write effect

As with the previously mentioned processes, the cover may show a light change in colour (pigment shifting) at folded spots caused by kinking the fibre.

• Other irregularities

Irregularities caused by the production process which cannot be avoided, such as

- Knots, thread thickening and thinning, which can be seen in the cloth as points of light or as nubs
- Colour deviations in cloths produced in webs (e.g. in triangular shades)
- Individual thread breakages and expansions at the seams with resulting sagging
- Sagging of the cloth due to its own weight or after the formation of a "water sack". can occur, and are unavoidable in production.

Tested awning cover

The "Oeko Tex Standard 100" certificate guarantees that no harmful dyes or chemicals were used in the manufacture of markilux awning covers. Cloths made of sunvas, sunsilk and sunbow usually achieve the highest possible sun protection factor for textiles (UPF 50 +). The UPF (Ultraviolet Protection Factor) specifies how much longer one can be exposed to sunlight when protected from it by the given UPF without suffering sunburn. Fabrics with an ultraviolet protection factor of 50+ (based purely on the calculated value) would enable you to sit out safely in the sun fifty times longer than you would otherwise be able to do without suffering sunburn, if you were to rely solely on the protection provided by your skin.


sunvas and sunsilk are innovative awning fabrics with a self-cleaning effect in rain (a minimum 14° awning pitch is required to ensure water runs off). The highly dirt-repellent finish guarantees years of radiant colours.



Legal disclaimer

The graphics and text sections in these instructions have been created with care. No liability can be assumed for any errors and their effects! We reserve the right to undertake technical modifications to the product and to these instructions! The instructions contain copyright-protected information. All rights reserved! The listed product or trade names are copyright trademarks.

1 Reading the instructions

 Read the operating instructions and all documents pertaining to the product (handover protocol, important notes etc.) carefully and in their entirety before using the product.

2 Awning with motor operation / (lighting operation optional)

markilux hand-held remote control io (868 MHz)

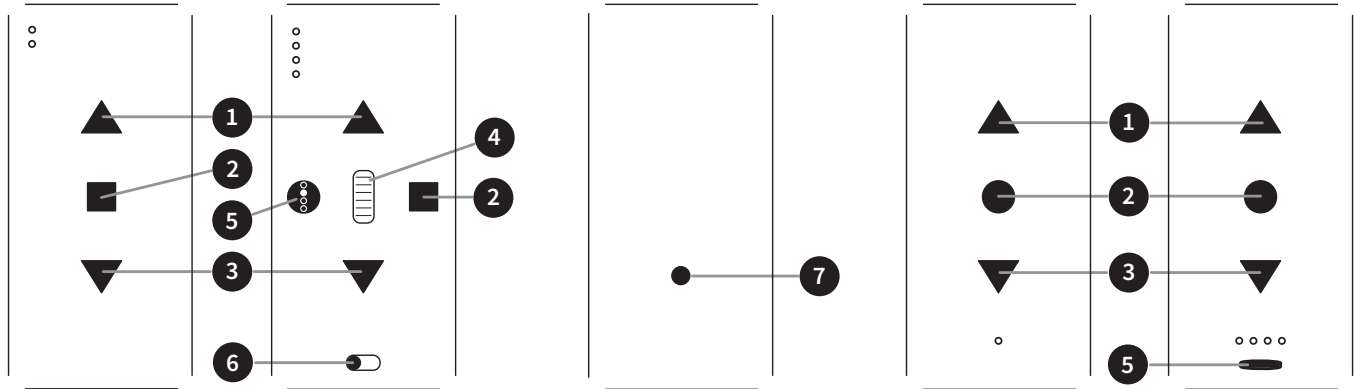
io 1-channel

io 5-channel

markilux hand-held remote control RTS (433 MHz)

RTS 1-channel

RTS 4-channel



- 1** = UP- button
- 2** = STOP- button
- 3** = DOWN- button
- 4** = Scroll wheel
- 5** = Channel selection button
- 6** = AUTO / MANU- switch
- 7** = PROG- button

Button assignment for lighting (optional):

	Short pressing of the button	Long pressing of the button
1 = LED-Spots WW	ON- button	High dimming- button
1 = LED-Spots RGB WW	ON / Επόμενο κουμπί επιλογής χρώματος	Colour change- button
2 = LED-Spots WW	Brightness STOP- button	Saved brightness- button
2 = LED-Spots RGB WW	Colour change STOP- button	Αποθηκευμένο χρώμα και κουμπί φωτεινότητας
3 = LED-Spots WW	OFF button	Dim down- button
3 = LED-Spots RGB WW	OFF / Πίσω κουμπί επιλογής χρώματος	Colour change- button
4 = Scroll wheel	Dim	Dim

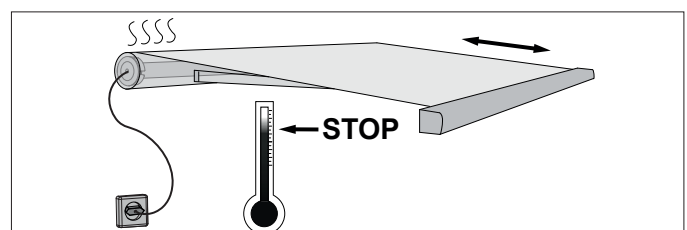
 The desired brightness / colour choice is saved by pressing button 2 **very slowly**. (reaction - light on / off)


Extend the awning by pressing the buttons button for extension / retraction. With radio-controlled operation, your markilux specialist must exactly explain the functions on the radio remote control to you, since, depending on the equipment, he can set these for you individually.

Observe here the separate operating instructions of the motor and, if available, of the controller manufacturer. The end stop for extension / retraction of the awning is limited. The end stop for the extension direction will be set by your specialist dealer.

Protection against overheating:

Multiple extension and retraction of the awning in rapid succession results in an automatic motor switch-off to preserve it from overheating. After cooling down the motor switches itself on again in operating readiness.



 In partially extended position and flat pitches (less than 14°) there is the increase risk of water collecting on the cover surface. The optimum cover tension is achieved when the awning is extended.

3 Modification or retrofitting

The following modifications can be carried out retrospectively on your awning by your markilux specialist.

- Replacement of the awning cover
- Retrofitting an automatic control system. In principle a motor drive must be available. Ask your specialist dealer about sun and wind sensors, remote control, Vibrabox etc.

4 What you should also know

Due to the compact awning construction and depending on the width and the projection, contact between cover and folding arms may occur during extension and retraction. This has no detrimental effect on the functionality and / or operating life of the awning.

5 Lighting (optional)

1 = LED-Spots in the side caps (24 V)

- 1.1 = WW bottom
- 1.2 = WW top
- 1.3 = RGB-WW bottom
- 1.4 = RGB-WW top

2 = LED-Spots in the front profile (24 V)

- 2.1 = WW
- 2.2 = RGB-WW

3 = LED-Line in the cassette (24 V)

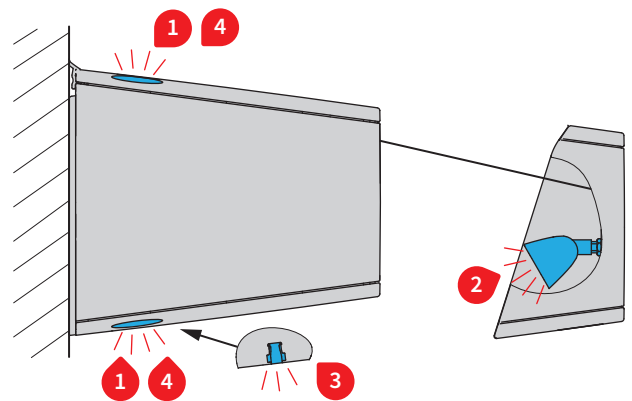
- 3.1 = WW
- 3.2 = RGB-WW

4 LED-Spots GU10 in the side caps (230 V)

- 4.1 = Philips Hue white & color ambiance unten
- 4.2 = Philips Hue white & color ambiance top

Colour variants / plug type:

- WW = warm white / SK2
- RGB-WW = RGB coloured light change and warm white / Mizu P25



! The LED lighting can heat up a lot. The lighting has to be switched off for some some minutes to cool down before you touch the individual lamps.

! You must never hang any objects or similar in front of the lamps, and it should be ensured that there are no objects immediately underneath the front profile both in retracted and in extended state. Observe in particular the safety clearances in "Important notes".

⚡ Do not touch or pull the mains leads (230 V) and the cables visible at any movement point of the folding arm. No objects must be suspended from these mains leads.

The mobility of the mains lead is limited in temperatures below zero. Therefore it has to be ensured, whether the electrician has protected the connection of your lighting via an RCCB (30mA), so that any eventual cable breakage does not pose any hazard.

i For safety reasons, the electronic transformer switches off automatically at a temperature of 80°C and on again after an appropriate cooling down phase.

Automatic shutdown: Thanks to an integrated timer, the spotlights shut down automatically (io home control technology: after 3 / 6 / 12 hours) (can be adjusted individually). The lighting can be reactivated by double-clicking either the switch or the remote control.

The radiation intensity of these LED lamps is harmless to people and underruns the RG 2 area acc. EN 62471. However, it is suggested not to look for a long time at the centre of the light source.

6 Replacing a defective lamp

These instructions for the replacement of defective illuminants at your markilux folding-arm awning are to be read and observed.

Exclusively LED lights, which have a very long operating life are used for the lighting of your markilux MX-4.

In case of a defective LED-Line, kindly contact your specialist dealer.

If an LED-Spot is defective you can change it yourself.



Regularly check the awning for signs of wear and damage to cables and lamps. If damages occur, an authorised markilux specialist dealer is to be entrusted with the adjustment.

Awnings which need to be fixed must not be used. Only spare parts released by markilux may be used.



Electrical installations or repairs are to be carried out only by qualified electricians in accordance with the installation regulations DIN VDE 0100.



The lighting system must be disconnected from the electricity supply during work on the system (unplug, switch off fuse). Switch on the lighting only when all cable connections have been established completely.

6.1 Overview spare parts LED-Spots

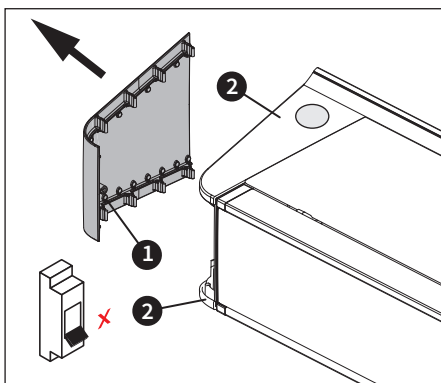
The following replacement parts are available via your markilux specialist dealer:

chapter	Lighting type	Article no.	
		warm white (WW)	RGB and warm white (RGB-WW)
6.2	1 x LED-Spots in the side cap	8272375	8272374
6.3	1 x LED-Spots in the front profile	8272380	8272381
6.4	1 x LED-Spots GU10 in the side cap	-	8271306

6.2 LED-Spots in the side caps



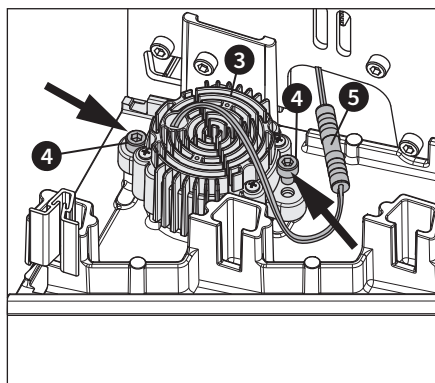
A mounting lever is included in the scope of delivery for removing the cover.



Τραβήξτε το πλευρικό κάλυμμα (1), το οποίο είναι στερεωμένο στο πλευρικό καπάκι (2) με κλιπς, χρησιμοποιώντας το μοχλό συναρμολόγησης.



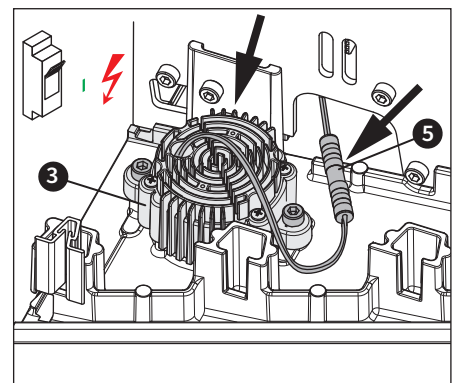
Switch off the RCCB (FI) for the awning beforehand.



2. Loosen the two cylindrical screws (4), disconnect the plug (5) and remove the defective LED spotlight (3).

LED-Spots (WW) = SK2 plug

LED-Spots (RGB-WW) = Mizu-P25 plug

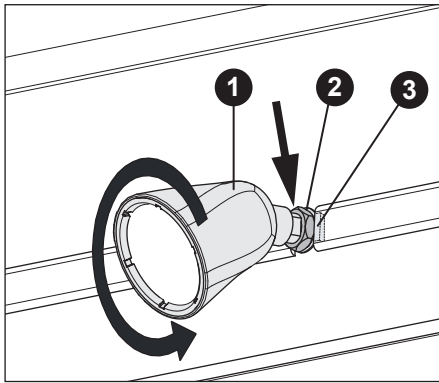


3. Insert the new LED-Spots (3), fix with the cylindrical screws and connect the plug (5).

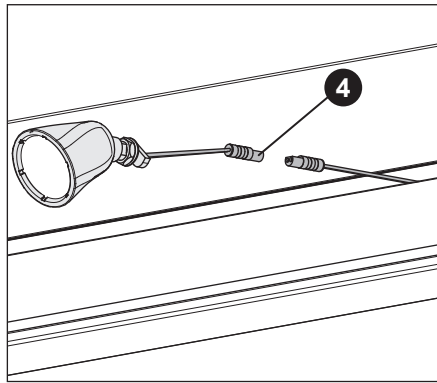


Subsequently, mount the side panel again and switch on the RCCB (FI).

6.3 LED-Spots in the front profile



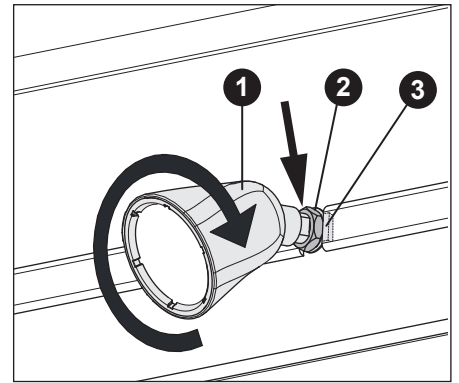
1. Loosen the hexagon nut (2) with a SW 13 spanner. Subsequently, turn the defective LED-Spot light (1) anti-clockwise by 90° to bring the clamp plate (3) in running direction of the slot and remove.



2. Disconnect the plug (4) of the defective LED-Spot from the power supply and insert the new LED-Spot.


LED-Spots (WW) = SK2 plug

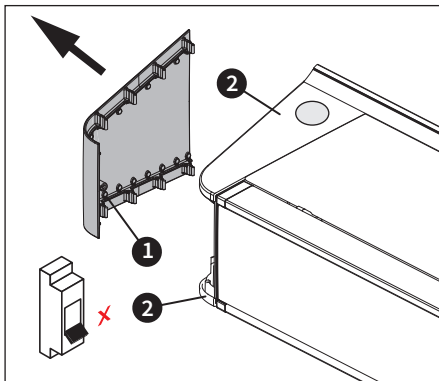
LED-Spots (RGB-WW) = Mizu-P25 plug




3. Insert the new LED-Spots (1) again into the front profile and turn by 90° to the right to engage the clamp plate (3) in the slot. Subsequently retighten the hexagon nut (2).

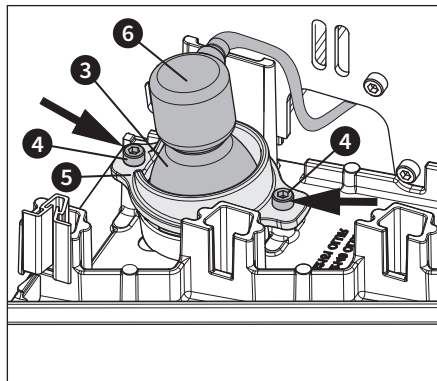
6.4 LED-Spots GU 10 in the side caps

 A mounting lever is included in the scope of delivery for removing the cover.

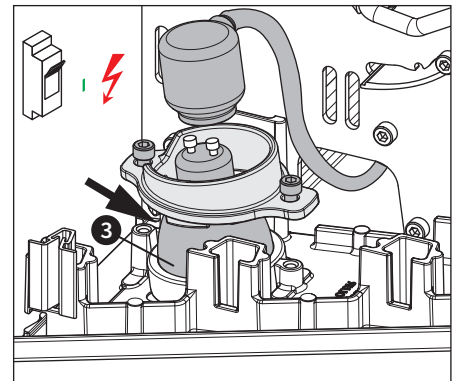


1. Pull off the side panel (1) that is fixed with clips to the side cap (2) using a wedge.


 Switch off the RCCB (FI) for the awning beforehand.



2. Loosen the two cylindrical screws (4) and pull off the bracket (5) with the LED-Spots (3). Take the LED-Spots (3) out of the GU10 socket (6).



3. Insert the new LED-Spots (3) in the GU10 socket and assemble.


 Subsequently, mount the side panel (1) again and switch on the RCCB (FI).

6.5 LED-Line recessed in the cassette

Repair and maintenance jobs such as the replacement of spare parts, a damaged outer flexible line or other electrical components, must be carried out **exclusively by the specialist dealer**.

7 Maintenance and care

For proper cleaning of the awning cover and the awning frame of your markilux awning, kindly pay close attention to the cleaning instructions in chapter "Important notes".

 Dirty cover profiles must always be cleaned with water. Use mild soaps or detergents suitable for delicate fabrics in lukewarm water. Abrasive cleaners, strong detergents, spray cleaner for glass, scouring cloths or brushes as well as solvents such as acetone, carbon tetrachloride, paint thinner or alcohol mixtures with more than 5% alcohol content may be aggressive to the surface and should never be used.

8 Disassembly and disposal

8.1 Dismantling

The awning must be removed only by a markilux specialist company.

8.2 Disposal

Packaging

The packaging protects the product from transport damage. The packaging materials are selected according to environmental and disposal aspects and are therefore recyclable.

Returning the packing to the materials circuit saves raw materials and reduces the accumulation of waste.

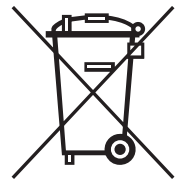
It is therefore essential that you dispose of packaging materials that are no longer required in accordance with the applicable legal regulations.



Electrical units

Electrical units are not worthless waste. Valuable raw materials can be recovered through environmentally friendly disposal.

This product is marked in accordance with Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE)



At the end of its service life, this product must not be disposed of with normal household waste, but must be taken to a collection point for the recycling of electrical and electronic equipment. The symbol on the product, the instructions for use or the packaging indicates this.

By reusing, recycling or other forms of recycling electrical units, you make an important contribution to the protection of our environment.

It is therefore essential that you dispose of electrical units in accordance with the applicable legal regulations.

Batteries

Batteries and battery packs can contain toxins that are harmful to the environment. Batteries and battery packs must not be disposed of in normal household waste

It is therefore essential that you dispose of batteries and battery packs in accordance with the applicable legal regulations.

