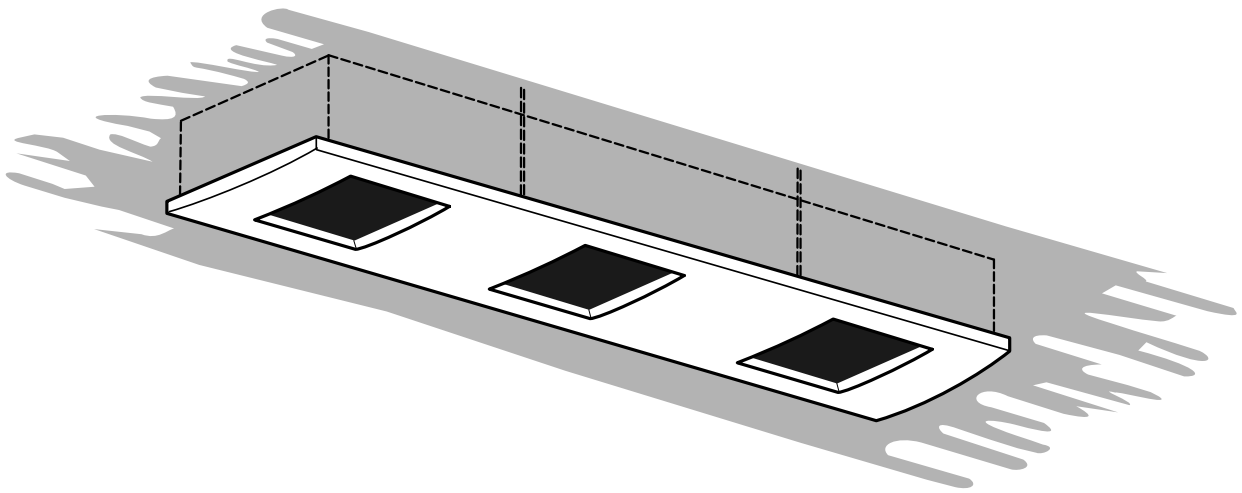


Operating Instructions

SONNENWIESE

KLAFS
MY SAUNA AND SPA



Preface

Your tanning device is designed and engineered to state of the art technology and is safe to operate. However, the equipment is not free from hazards if operated by untrained persons or persons not briefed or trained in its proper use or if used for other purposes than intended. Therefore the operating instructions and the safety references must be carefully read and understood by each person who is charged with the installation, commissioning, start-up, operation, maintenance or repair of the tanning device. Prior to commissioning the device please have a specialist provide you and/or your staff with a proper training regarding its use. Should contrary to expectations a technical defect occur in your device, please contact the respective Service Department or your Klafs Dealer.

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1. Safety Instructions

1.1. Intended Use

All devices are exclusively intended for the use inside of buildings for the tanning of persons. Do not operate the device within highly combustible areas or in damp rooms. The rooms must have good ventilation. If the device is operated in a sun studio the hygiene of both the device and the area must be closely controlled. Any other use is considered to be not in accordance with the terms of usage. The manufacturer is not responsible for damage resulting from other forms of usage; the user alone carries this risk. Following the manufacturer's operational, maintenance and repair terms and conditions is also considered a part of the terms of usage. Maintenance, repair and similar work is only to be carried out by the customer service of KLAFS or by their authorized representatives. The device must only be operated by persons who are informed over its usage and the dangers involved. The relevant accident prevention regulations and other generally recognized industrial health and safety regulations must be observed. Damage resulting from arbitrary changes to the device are excluded from the manufacturer's liability. This applies in particular to damage due to lamps or filter disks not approved by KLAFS.

1.2. Product liability

The user is expressly informed that the device may only be used as intended. The user assumes all liability if the device is not used as intended. Consequently the manufacturer will not accept any liability in such cases.

1.3. Conduct in emergencies

Remove the power plug, and/or remove power from the device using the main power switch or fuse panel and guard against unauthorized restoration of the power.

1.4. Explanation of the symbols

In these operating instructions, all passages in the text relating to your safety, as well as notices and tips, are marked with the following symbols.

Pass all safety instructions on to other users.



Caution / Warning!

This symbol designates an immediate health risk and danger for the life of persons. Non-observance of these notes and references will result in serious health-impairing effects, up to the point of lethal injuries.



UV radiation

UV radiation can cause damage to eyes and skin. UV radiation sources must therefore only be operated when appropriate measures have been taken to ensure personal safety. Do not look directly into the radiation source and ensure that you are wearing the supplied safety glasses to protect your eyes.



This symbol provides important information for the appropriate handling of the device. Non-observance of these notes and references may lead to malfunctions at the device or in the environment.

- ☞ This symbol stands for application tips and especially useful information. They serve to help you in the optimal use of all functions of your device.
- ☞ In the text different diagrams are referred to. E.g. Fig. 5 item 2 is indicated in the text by reference (5/2).

1.5. Position of device user

In front of the device and on a lounge stretched out in horizontal position beneath the device.

1. Safety Instructions

1.6. Prior to commissioning

The safety and the operating instructions must be read thoroughly before the installation, commissioning and start-up of the device. The requirements of KLAFS and the Standards Body must be followed.

1.7. Device commissioning

Prior to every startup it must be ensured that local safety regulations as well as all safety instructions are adhered to.

1.8. Dangers



Warning!

Ultraviolet radiation from the sun or UVC devices can cause eye or skin damage, such as skin ageing and possibly skin cancer. These biological effects depend on the kind and quantity of the exposure to the sun and on the skin sensitivity of the individual person. The skin can show signs of sunburn after repeated usage of the tanning device. Excessive repeated ultraviolet radiation from sunlight or UVC devices can lead to premature ageing of the skin and also to an increased risk of skin tumours. The ocular surface of the unprotected eye can become inflamed and in some cases, excessive tanning can damage the retina. Cataracts can occur following unprotected tanning. Special care should be taken in cases of individual UVC sensitivity or when certain medications or cosmetics are used at the same time.

Therefore it is imperative to observe the following safety instructions without fail:



Caution!

High-intensity light, do not look directly into the source.
 Close your eyes when sun bathing and always wear the safety glasses provided.
 Remove make-up before using the tanning device.
 Do not use suntan lotion.
 Remove jewellery before using the tanning device.
 Do not expose yourself to more than one tanning session and do not do any additional sunbathing in natural sunlight on the same day.
 A timetable with recommended exposure times and intervals is attached to each device.
 The recommended exposure times apply only to the lamp configuration prescribed by the manufacturer.
 If you are receiving medical treatment or taking medication, in any case seek the advice of the medical practitioner who is treating you. Certain medications or cosmetics can increase sensitivity.
 If any persistent swellings, sores or pigmented moles on your skin show signs of change, immediately consult the medical practitioner who is treating you.
 A minimum of 48 hours should elapse between the first two tanning sessions.
 The device may be used only when being stretched out in horizontal position.
 Do not sit or stand under the device while tanning.

Continued on the next page

1. Safety Instructions

1.8. Dangers

Continued



Warning!

Use only after you have obtained medical advice for yourself.

Non-users, children in particular, must not be present when the device is in operation.

The UV device should not be used by persons:

- under the age of 18
- who tend to get freckles
- with naturally red hair
- with any atypical discoloured areas of the skin
- who have more than 16 moles (2 mm or larger in diameter) on their bodies
- who have atypical moles (atypical moles are asymmetrical moles with a diameter greater than 5 mm that have varying pigmentation and irregular borders; if in doubt, a medical practitioner should be consulted)
- who suffer from sunburn
- who do not tan at all in natural sunlight or cannot tan without getting sunburnt
- who easily get sunburnt in natural sunlight
- who have had a history of repeated, serious sunburn during their childhood
- who are suffering or have suffered from skin cancer or have a predisposition to this
- on whose first-degree relatives black skin cancer (melanoma) has occurred
- who are undergoing medical treatment for complaints that are associated with photosensitivity
- who are receiving photosensitizing medication.

Notes:

- The radiation exposures should not exceed the personal minimum erythema dose (MED). This means the minimum UV dose that causes a perceptible reddening of the skin. If erythema (reddening of the skin) occurs some hours after exposure, no further exposures should take place. After a week, the exposures specified at the beginning of the exposure plan can be resumed.
- If any unexpected effects occur, such as itching within 48 hours of the first exposure, consult a medical practitioner before any further exposures take place.

Continued on the next page

1. Safety Instructions

1.8. Dangers

Continued



Note 1:

The recommended exposure time for the initial test radiation of untanned skin must comply with a dose that does not exceed 100 J/m^2 , weighted in accordance with the action spectrum for UV erythema or based on the result of a test on a limited surface area of the skin. The second and subsequent exposures should last at least 10 minutes.

- The recommended number of exposures within a year should not be exceeded.

Note 2:

As each UV radiation exposure increases the risk of skin cancer, there is no safe upper limit for the annual dose. However, it is recommended that 25 kJ/m^2 not be exceeded, weighted in accordance with the action spectrum for non-melanoma skin cancer and based on the recommended radiation exposure programme.

- Do not use the device, if the timer is defective or if the filter is broken or has been removed.
- Replace the replaceable UV lamp only with lamp types that are designated on the device. Replace UV fluorescent lamps only with lamp types that are marked with an equivalence code that is within the equivalence code range specified and explained on the device.

2. Data for the user of the device - operation

2.1. Start of a tanning session

Heed the timetable.

Do not exceed the recommended exposure time for your skin type.

Avoid sunburn.

Never take a sun bath with an existing sunburn.

Depending on skin type a specific degree of tanning can be achieved. This can not be increased through the use of a Solarium, but can only be retained.

Close your eyes when sun bathing and always wear the safety glasses provided.

People who have had eye lens surgery must protect their eyes by wearing safety glasses.

Start:

The device is operated by a switch

1. Operate the switch.
2. Lie down on the lounger.



Caution!

Do not sit or stand under the device while tanning.

3. Operate the switch again in order to switch the device Off.
 4. If you do not operate the switch to shut Off the device, the device switches Off automatically at the end of the internal safety timeout switch (ex-works setting).
- ☞ In order to restart the device, you must allow for a cooling phase of five minutes, then turn the switch off and back on again.

The device is operated by a push button

1. Operate the push button.
2. Lie down on the lounger.



Caution

Do not sit or stand under the unit during tanning sessions.

3. After the unit's internal safety-time-out feature has elapsed (configured ex-works), the device switches off automatically.
- ☞ In order to restart the device, you must allow for a cooling phase of five minutes.

Coin-operated device

1. Insert coins or chips into the coin-operated timer.
2. Lie down on the lounger.



Caution!

Do not sit or stand under the device while tanning.

3. Depending on the coin-operated timer used, the device switches On automatically after the lead time.
 4. The lamps switch Off automatically once the time set by the coin-operated timer has elapsed.
- ☞ In order to restart the device, you must allow for a cooling phase of five minutes.

3. Data for the user/operator - Putting into operation

3.1. Important information!

Do not switch On or use defective tanning devices.

Observe the maximum ambient temperature (max. 35 °C), otherwise the device can overheat and be turned Off by the temperature limiter.

Therefore provide for sufficient fresh air in the tanning room.

Observe hygienic requirements.

Provide eye protection and make sure that they are worn.

Inform the users about adhering to skin-type dependent tanning exposure times.

Have assembly and operating instructions ready.

Ensure excellent visual access to the safety instructions and the timetable affixed in the tanning area.

The device is adjusted ex-works for a tanning duration of 20 minutes.

This maximum exposure time may not be exceeded.

3.2. Before device startup

The safety and the operating instructions must be read thoroughly before the installation, commissioning and startup of the device.

3.3. Device commissioning

Before commissioning and every start-up ensure that all local safety regulations as well as the safety instructions are observed. The device can be taken into operation if the device is completely installed, electrically attached and, if required, connected to the coin-operated timer and/or the central control system.

4. Important information for the user/operator - Cleaning

4.1. Cleaning the tanning devices



Caution!

Please ensure proper hygiene measures in the area of the tanning device and its environment.

Dust deposits decrease the tanning effect.

Do not spray the cleaning agent into your eyes!

Do not spray into open flames!

Do not consume! Do not place within the reach of children!

Do not pour liquid over the device as otherwise humidity gets trapped underneath the covers.

Use cleaning agents according to instructions. Follow the application time recommended by the manufacturer.

Body

1. Clean all exterior surfaces of the device with a damp cloth, optionally adding a small amount of dishwater liquid to the water.
2. Do not use scouring cleansers.
3. Remove persistent grime with a soft cloth and an ecologically degradable cleaning agent (e.g. neutral soap).

Reflectors

1. Wipe the reflectors Off when changing the lamp with a cleansing alcohol-soaked cloth.

5. Maintenance



Caution!

Always disconnect the device from the power supply.

The user/operator must ensure that the device is always in perfect condition when being operated.

Ensure the technical installation are regularly checked and maintained.

When carrying out repair work or recommissioning, additional measures must be taken, such as providing barriers to stop unauthorized persons accessing the device.

Only authorized persons are allowed to work on the device; please contact your specialized dealer or KLAFS directly.

Do not carry out any procedure that may impair the safety of the device.

Use a safe ladder.

Only order original spare parts from your specialized dealer or directly from KLAFS. No liability can be assumed if any other devices are fitted, other than the original high-intensity lamps or ignition device.

Do not operate the device without device-specific filter disks.

5.1. Opening/adjusting/closing the dust cover

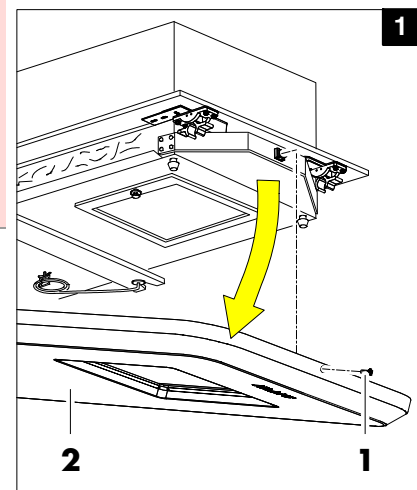


Caution!

Before starting maintenance or repair work, disconnect the device from the power supply.

Opening the dust cover

1. Remove the safety screw (1/1) from the dust cover.
2. Using both hands, lower the dust cover by 90 degrees (1/2).

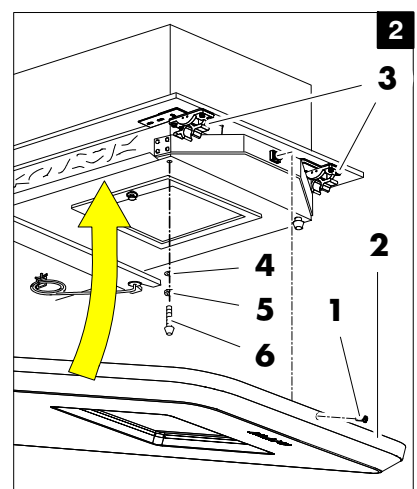


Adjusting the dust cover

1. Screw the two pressure spindles (2/6), the nuts (2/5) and the washers (2/4) supplied into the hole.
2. Check that the dust cover is positioned evenly and readjust it using the two pressure spindles, if necessary. Secure the pressure spindles (2/6) with the nuts (2/5).

Closing the dust cover

1. Push the dust cover (2/2) up with both hands until it locks into both clips (2/3).
2. Tighten the safety screw (2/1) on the dust cover.



5. Maintenance

5.2. Removing/fitting the dust cover



Caution!

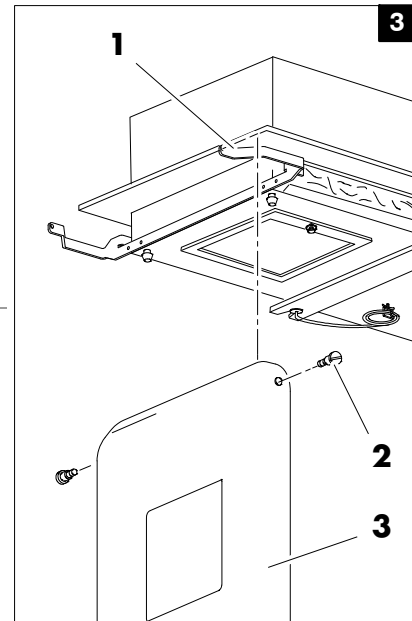
Before starting maintenance or repair work, disconnect the device from the power supply.

Removing the dust cover

1. Using both hands, lower the dust cover by 90 degrees (3/2).
2. Remove the two screws (3/2) and remove the dust cover.

Fitting the dust cover

1. Align the holes on the dust cover (3/3) with the holes on the angle brackets (3/1).
2. Screw in the screws (3/2).



5. Maintenance

5.3. Moving the device into the maintenance/tanning position

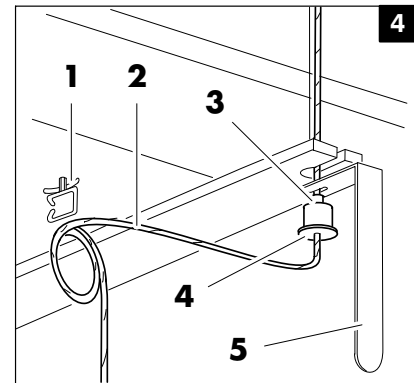


Caution!

Before starting maintenance or repair work, disconnect the device from the power supply.

Moving the device into the maintenance position

1. Remove the four wire cables (4/2) from the clamp hooks (4/1).
2. Unwind the four wire cables and let them hang down.
3. Using the unblocking tool (4/5), press and hold the small flange (4/3) of the wire-cable holder (4/4).
- ☞ The wire-cable holder can be lowered.
4. Place the device in the required position along the wire cables.
5. Once the maintenance work has been completed, slide the device back into the tanning position.



Moving the device into the tanning position

1. Using the unblocking tool (4/5), push the wire-cable holder (4/4) and thereby the device along the wire cables towards the ceiling.
- ☞ The wire-cable holders will hold themselves in any position.
2. Push the device toward the ceiling until:
 - The housing rests flush against the ceiling if it is a concrete ceiling
 - The bracket around the circumference of the housing rests flush against the suspended ceiling if it is a suspended ceiling.
3. Wind the attachment cables (4/2) together in a loop and fasten them to the lower surface of the housing using the intended clamp hooks (4/1).

5. Maintenance

5.4. Maintenance of the high-intensity lamps



Caution!

Before starting maintenance or repair work, disconnect the device from the power supply.

Opening the dust cover

- ▶ Opening/closing the dust cover, see Section 5.1.

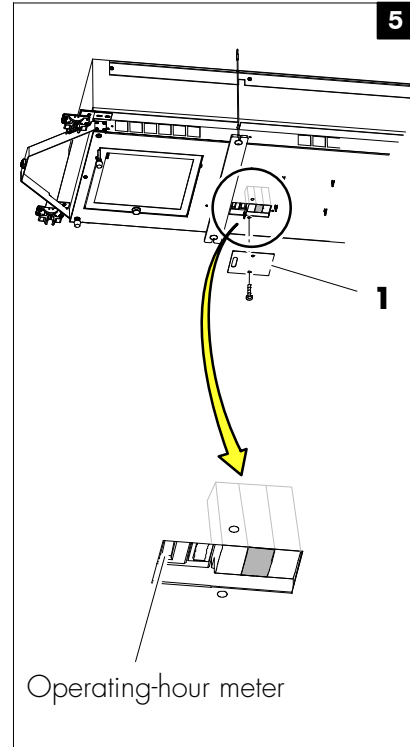
The high-intensity lamps are equipped with a very specific glass-filter configuration. The device must not be operated under any circumstance if the filter disks are damaged or missing. The inspection window (5/1) for the operating-hour meter is located on the underside of the SONNENWIESE.

Risk of being burnt. Risk of inflammation of the eye caused by ultra-violet radiation.

When immediately turning the high-intensity lamp back on again, depending on type, it does not start instantly or does not reach full power as it requires a cooling phase of approx. 4 minutes.

We recommend replacing the high-intensity lamp after approx. 750 operating hours.

When replacing the high-intensity lamp, please refer to the equipment manufacturer or your specialized dealer. No liability can be assumed if any other devices are fitted, other than the original high-intensity lamps or ignition device.



One XTT filter disk (mirrored) and one transparent filter disk is placed in front of each high-intensity lamp.

Continued on the next page

5. Maintenance

5.4. Maintenance of the high-intensity lamps

Continued

5.4.1 BREAKSAFE

The transparent filter disks are secured with a BREAKSAFE device. If one of these transparent filter disks breaks, the electric circuit is interrupted and the device can only be restarted once the filter disk has been replaced. The XTT filter disks (mirrored) must be visually inspected.

5.4.2 Changing the high-intensity lamp

Opening the dust cover

◆ Opening/closing the dust cover, see Section 5.1.

Removing the high-intensity lamp

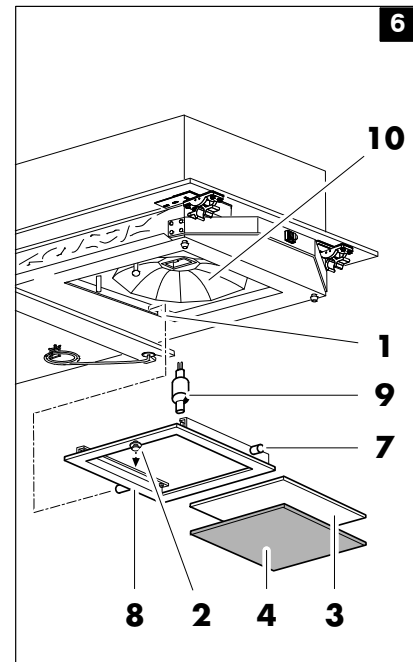
1. Pull the quick-lock (6/2) downwards on the appropriate housing.
- ☞ Caution! The pane retainer (6/8) lowers by approximately 15 degrees.
2. Hold the pane retainer (6/8) with both hands and lift it slightly towards the device body.
- ☞ The pins (6/7) slip from their anchorage (6/1).
3. Pull the pane retainer forward with both hands.
4. Hold the high-intensity lamp (6/9) by the rectangular base and remove it from the socket.

Cleaning the reflector

1. Clean the reflector (6/10) using a clean cloth dampened with alcohol.

Installing the high-intensity lamp

1. Hold the new high-intensity lamp (6/9) by the base.
2. Insert the high-intensity lamp into the socket.



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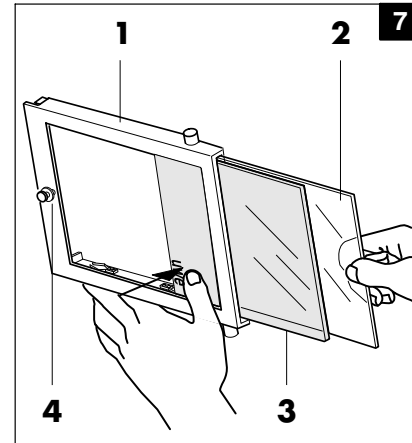
5. Maintenance

5.4. Maintenance of the high-intensity lamps

Continued

Removing the filter disks

1. Hold the pane retainer (7/1).
2. Hold the pane retainer with both hands and lift the filter disks with both thumbs over the respective alignment stops (rivet or angle) on the side opposite the quick-lock (7/4).
3. Pull out the XTT filter disk (7/3) (mirrored) and the transparent filter disk (7/2).



Cleaning the filter disks

1. Clean the filter disks with warm water, adding a few drops of washing-up liquid to the water if necessary.
2. Dry the filter disks with a clean cloth.

Fitting the filter disks



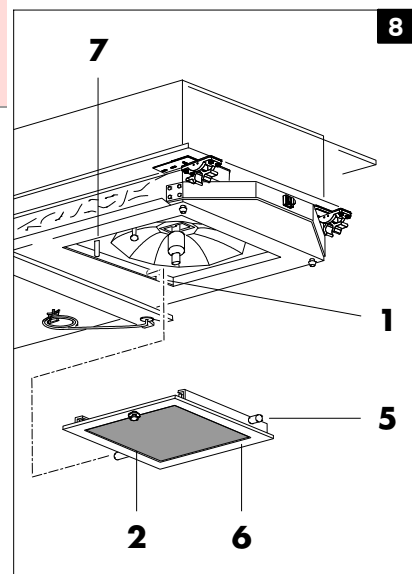
Caution!

The device must not be used without the filter disks.
The coated side of the XTT filter disk faces the lamp.
It must be possible to read the KLAFS logo on the XTT filter disk from the lounger.

Caution! When assembling:

The XTT filter disk (mirrored) is fitted on the user side, the transparent filter disk is fitted on the lamp side.
Insert the two filter disks according to Fig. 6 and Fig. 7.

1. Equip the pane retainer (7/1).
2. Push the filter disks in over the respective alignment stop (rivet or angle).
- ☞ The filter disks latch in.
3. Hang the fully mounted pane retainer (8/6) with the cleaned filter disks into the recesses (8/1) of the GB-housing using the pins (8/5).
4. Swivel the pane retainer towards the GB-housing until the pane retainer rests flush against it.
- ☞ As a result, the pins of the micro switch (8/7) for the BREAKSAFE safety device are pressed down.
5. Press the quick-closure (8/2).
- ☞ The pane retainer is firmly locked into the GB housing.



Closing the dust cover

- ◆ Opening/closing the dust cover, see Section 5.1.

5. Maintenance

5.5. Filter mats

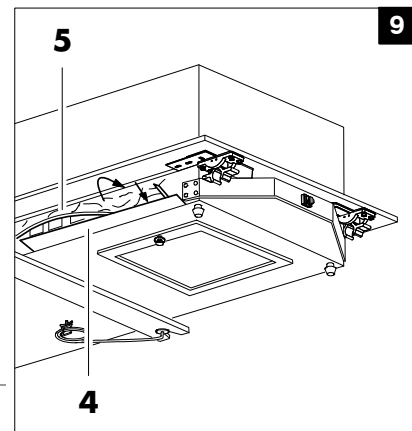
5.5.1 Replacing the filter mats

Air to cool the device is fed into the entrance of the devices through micro filter mats. Lint, hair, dust particles, etc., are filtered out there, so that interior components, such as lamps, only need to be cleaned at longer intervals. These filtered-out particles clog the filter mats after prolonged use and this impairs cooling of the device.

Therefore, regularly replace the filter mats in order to ensure the device does not overheat. Dirt accumulation and operating hours determine the replacement intervals.



Only order original filter mats from your specialized dealer or the equipment manufacturer. Check the filter mats after every 200 operating hours. Always disconnect the device from the power supply.



Opening the dust cover

- ▶ Opening/closing the dust cover, see Section 5.1.

Changing the filter mat

1. Remove the filter mat.
2. Take the new filter mat strip (9/5) and feed the long side into the holder (9/4).
3. Fold the filter mat strip against the unit. The filter mat strip is firmly locked into place.

Closing the dust cover

- ▶ Opening/closing the dust cover, see Section 5.1.

5. Maintenance

5.6. Chain of safety features



The device is equipped with a chain of safety features, including a timer switch, a safety-time-out feature, BREAKSAFE and a temperature limiter.

- The internal timer switch (K2/K4) is set ex-works to 20 minutes. After 20 minutes, the device switches off automatically.
The time set on the K4 timer switch must not exceed 20 minutes.
The maximum tanning time of 20 minutes must not be exceeded.
This time must not be extended by the operator under any circumstance, but it can be reduced if desired (see Section 9.2.).
If a coin-operated timer is attached to the device, it must always match the time set on the device-integrated timer switch (K2/K4) (see Section 9.2.3).
- The safety-timing circuit consists of a timing element (K3), which provides the safety-time-out feature, i.e. after this time period, the device always switches off automatically. The time period for the safety-time-out feature is set to 110% of the time on the timer switch, i.e. the ex-works setting is 22 minutes.
- The BREAKSAFE safety device switches the device off if a transparent filter disk is broken. The device can be switched on again only after the faulty transparent filter disk has been replaced.
- The temperature limiter provides temperature monitoring, protecting the tanning unit from excess temperatures.
The temperature-monitoring feature also limits the temperature of the attachment surface to a safe value.
Once the device has cooled down sufficiently, it switches on again automatically.

6. Tips for eliminating smaller faults



Warning!

Before starting maintenance or repair work, disconnect the device from the power supply. Repairs must only be carried out by KLAFS or by authorized persons. No safety devices may be dismantled or disabled. Use a safe ladder.

The device is too hot (temperature limiter tripped)

- The filter mat is clogged. Please replace it.
- The fans that are built into the unit for cooling have failed. Please have the unit checked by KLAFS or an organisation authorized by KLAFS.
- The room temperature is too high. Ensure there is a sufficient fresh-air supply in the tanning room.

7. Disposal

Device and lamps



The Solarium and all fluorescent lamps, high-intensity lamps and lighting lamps are hazardous waste material. Do not dispose of it together with domestic refuse. KLAFS, or one of the disposal companies designated by KLAFS, can dispose of the device.

8. Information for tanning times

8.1. What is your skin type?



	Skin type 1	Skin type 2	Skin type 3	Skin type 4
Skin:	extremely light	a bit darker than skin type 1	light to slightly tanned	slightly tanned, olive
Freckles:	many	a few	none	none
Hair:	reddish	blonde to brown	dark blonde, brown	dark brown
Eye colour:	blue, rarely brown	blue, green, grey	grey, brown	dark
Nipples:	very light	light	darker	dark
Our tip for you:	No tanning	For your first tanning session we recommend a duration of 20 minutes		
		Increase slowly to max. 2 sessions of 20 minutes each	Increase slowly to max. 3 sessions of 20 minutes each	Increase slowly to max. 4 sessions of 20 minutes each



Please read the instructions carefully.

These specifications refer to a distance of 2 m between SONNENWIESE and lounger. If this distance is reduced (up to ≥ 1.5 m) the tanning time must be reduced by half.

Please observe:

These recommendations refer to the standard lamp configuration according to the operating instructions.

Just as natural sunlight, UV radiation can, if applied incorrectly, cause damage to the eyes and skin, such as premature skin ageing and possibly carcinogenic irritations of the skin.

Certain medications and cosmetics can increase sensitivity.



As the light is very bright, we would like to ask you to avoid looking directly into the light-source and wear the safety glasses provided for the protection of your eyes.

9. Specifications only for technicians and Klafs professionals - Installing the equipment



Warning!

The device may only be installed by KLAFS professionals or authorized persons. Installing the device requires at least two persons.

The installation areas must be well ventilated. Danger of overheating.



Warning!

All devices are intended exclusively for the tanning of persons inside buildings. Do not operate the device within highly combustible areas or in drying rooms. The rooms must be well ventilated.

Ensure there is a sufficient fresh-air supply in the tanning room. When determining the installation location, the VDE regulations 0100 parts 701 (bathrooms) and 702 (pools, swimming pools) must be considered. The equipment's protection class is IP X2 (drip-water protection). In swimming pools, it may only be installed outside the safety zones; in bathrooms, only within or beyond safety zone 3.

The assembly is mounted from inside the room in a cavity (suspended ceiling), is mounted directly onto the ceiling, or is freely suspended, maintaining a distance to the ceiling. With suspended or wire-mesh ceilings (Rabitz ceiling), the device is mounted with the traction ropes onto the load-bearing ceiling and then moved using the traction ropes until it flush against the suspended ceiling. Please contact an expert.

The SLM 8 N Fischer dowels and M8 x 85 eye bolts supplied for fixing the device are suitable for use in concrete only. In the case of other ceiling material, please contact an expert.

The wood-screw eye bolts supplied are only suitable for timber beams with a minimum thickness of 80 mm.

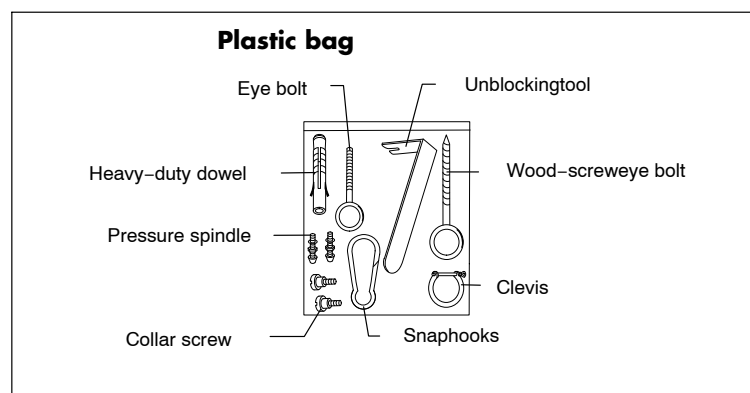
The tanning device weighs approx. 65 kg; the dowel supplied can bear a load rating - in the case of a B25 concrete ceiling - of up to approx. 3.5 kN (350 kg).

The ceiling must have an appropriate load-bearing capacity.

Ideally, the distance between the lounge surface and the SONNENWIESE should be 2 m. If there is a smaller or larger distance for construction reasons, please ensure that the optimal tanning times are reduced or extended.

No flammable items may be located within the device's cone of light. The ceiling materials must not be combustible. The housing temperature can reach up to 120 °C.

Make sure that items located near the device are UV-resistant; the manufacturer is not liable for any damage which may result from such use.



9. Specifications only for technicians and Klafs professionals - Installing the equipment

9.1. Installation and ceiling requirements - Housing assembly

Fitting to the ceiling

As standard, the device is delivered with the cover plate (10/1) mounted on top. For a ceiling installation, the air-outlet cover plate (10/1) is mounted on top, pointing downwards.

1. Remove the air-outlet cover plate (10/1) and screw the plate back into the bottom bore holes (10/2).



Caution!

The device must always be kept horizontal. Do not tilt it. Switch off all fuses.

Mounting the eye bolts - Suspended ceiling

1. Take the mounting template and saw an opening (1725 mm x 415 mm) into the suspended ceiling where you intend to install the device.
2. Drill four 12-mm-diameter holes into the **load-bearing concrete ceiling** spaced in relation to the cut-out opening as indicated by the four round markings on mounting template. The minimum hole depth must be 60 mm.

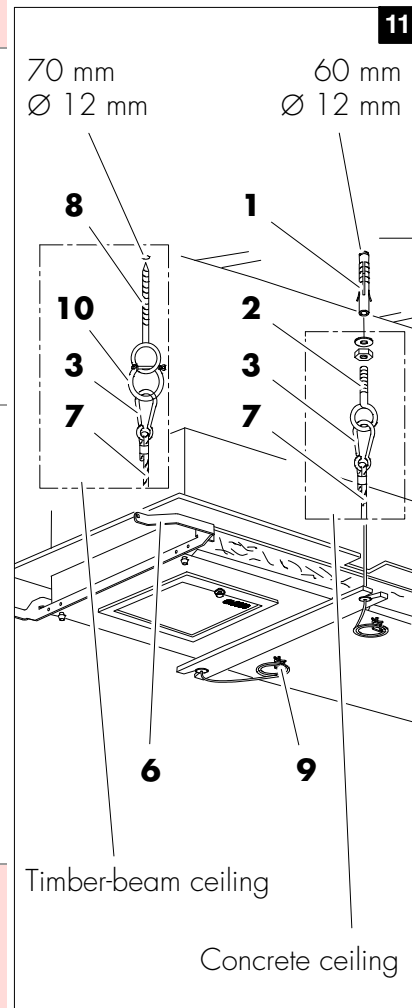
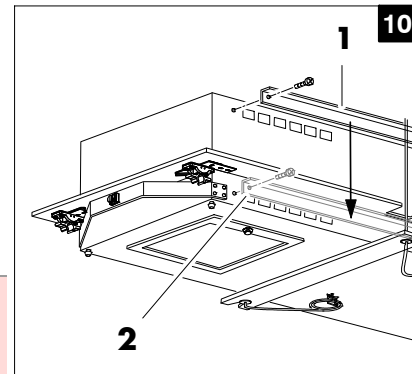
Concrete ceiling

1. Drill four 12-mm-diameter holes into the concrete ceiling at the required assembly location according to the four round markings drawn on the mounting template. The minimum hole depth must be 60 mm. The cut-out (1725 mm x 415 mm) on the mounting template is the size of the housing.
2. Place the four SLM 8 N (11/1) dowels supplied into the holes.
3. Screw in the four eye bolts (11/2) using a washer and a M8 nut for each, in accordance with Fig. 10 and tighten the eye bolt against the nut (11/3).



Caution!

It is absolutely essential that the eye bolts (11/2) are tightened against the nut (11/3).



Continued on the next page

9. Specifications only for technicians and Klafs professionals - Installing the equipment

9.1. Installation and ceiling requirements - Housing assembly

Continued


Caution!

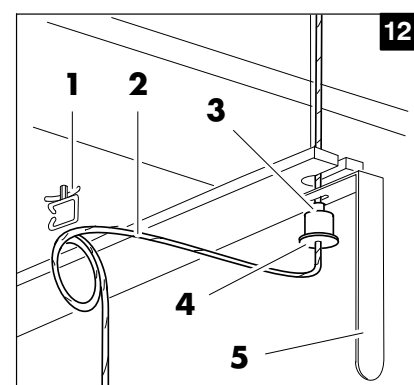
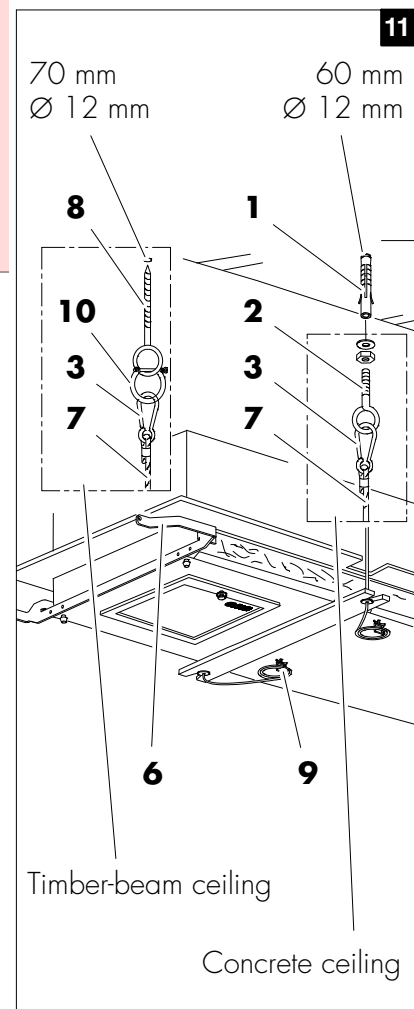
It is absolutely essential that the eye bolts (11/2) are tightened against the nut (11/3).

Timber-beam ceiling

1. Use a 8.5-mm-diameter drill to make four holes in the timber-beam ceiling at the required location, in accordance with the four round markings drawn on the mounting template. The minimum hole depth must be 70 mm. The cut-out (1725 mm x 415 mm) on the mounting template is the size of the housing.
2. Screw the four wood-screw eye bolts (11/8) supplied into the holes up to the thread end.
3. Insert the clevises (11/10) supplied into the wood-screw eye bolts (11/8).

Fitting the device

1. Place a high base (e.g. a table) underneath the fitted eye bolts (11/2) and wood-screw eye bolts (11/8) with clevis (11/10).
2. Work together with a colleague to pick up the device and place it on the table.
3. Use the 4 snap hooks (11/3) on the wire cables to hang the device in the eye bolts and wood-screw eye bolts with clevis, which you have fitted to the ceiling.
4. If the wire cables (11/7) are too short, unwind additional length from the clamp hook (11/9).
5. Using the unblocking tool (12/5) supplied, press the flange (12/3) against the wire-cable holder (12/4).
6. Push the wire-cable holder (12/4) down.
7. Pull the wire cables through and connect the snap hooks (11/3).


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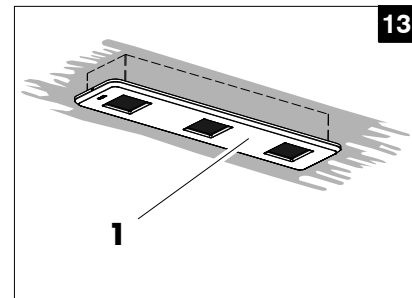
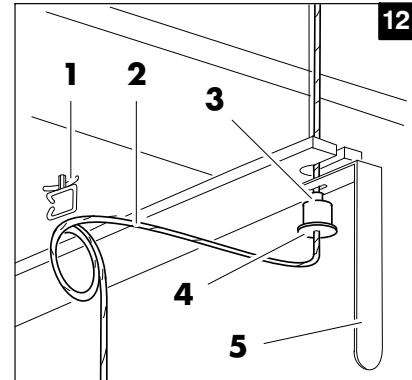
9. Specifications only for technicians and Klafs professionals - Installing the equipment

9.1. Installation and ceiling requirements - Housing assembly

Continued

Adjusting the device's height

1. Using the unblocking tool (12/5), press and hold the flange (12/3) of the wire-cable holder. Push the wire-cable holder (12/4) and thereby the device along the wire cables towards the ceiling.
- ☞ The wire-cable holders will hold themselves in any position.
2. Push the device toward the ceiling until the housing rests flush against a concrete ceiling. If it is a suspended ceiling, the bracket around the circumference of the housing rests flush against the suspended ceiling.
- ☞ Ideally, the distance between the lounge surface and the dust cover (13/1) should be 2 m.
3. Wind the wire cables (12/2) together in a loop and fasten them to the lower surface of the housing using the intended clamp hooks (12/1).



Fitting the dust cover

- ◆ Fitting the dust cover, see Section 5.2.

Adjusting/closing the dust cover

- ◆ Opening/adjusting/closing the dust cover, see Section 5.1.

9. Specifications only for technicians and Klafs professionals - Installing the equipment

9.2. Electrical connection - Configuration



The connection must only be established by a qualified electrician in accordance with the valid DIN VDE regulations, as well as accident prevention regulations.

9.2.1 Connecting the device

Switch off all fuses.

Arrange the fuse, RCCB switch ≤ 30 mA and main switch on-site according to applicable valid DIN/VDE/EVU regulations.

Fit a separation device in the fixed electrical installation, which is provided with separation from the mains with a contact opening of at least 3 mm on each pole.

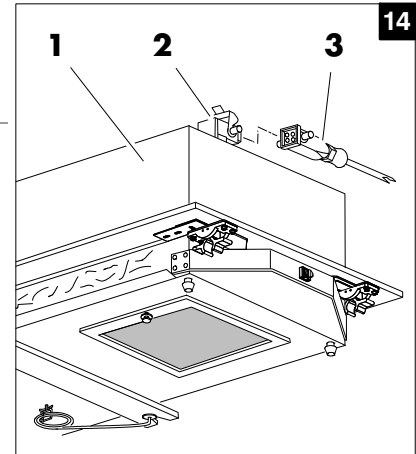
The associated wiring diagram is supplied separately with each device.

The device is supplied with a socket housing with a 4-m cable to connect to the 1 N PE ~ 50 Hz, neutral conductor, grounding conductor and signal cable. Insert the socket housing (14/3) into the pin housing (14/2) mounted on the housing (14/1), and secure the socket housing.

It is controlled by a 230-V switching signal which is supplied by a switch, a push button, an external central control (coin-operated timer) or an external timer.

When using a push button, the toggle switch must be set to "T".

The device is adjusted ex-works for a tanning duration of 20 minutes.



Caution!

The maximum tanning time must not be exceeded.

Continued on the next page

9. Specifications only for technicians and Klafs professionals - Installing the equipment

9.2. Electrical connection - Configuration

Continued

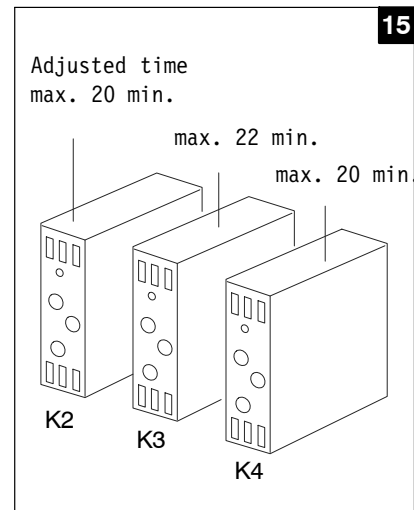
9.2.1 Connecting the device

The run-time of the coin-operated timer or external timer switch must match the time set via the K2/K4 time relay on the tanning device (20 minutes). The K3 safety timing relay must then accordingly be set to 22 minutes (always 110% of the K2/K4 time). See Section 9.2.3.

The switching signal acts on the coil of the main contactor via a timer switch (K2/K4) and a safety timing relay (K3) via a chain of safety features (safety-time-out feature, temperature limiter, BREAKSAFE).

The switching signal must be active for the duration of tanning session.

The tanning unit reacts to the leading edge of the signal only.



Caution!

Please note that when connected using a ≤ 30 mA residual current-operated circuit breaker, current-leakage peaks may occur during ignition; these last only a short time and can only be detected by an oscillograph. If several devices are operated together via a residual current-operated circuit breaker, these peaks may accumulate if the devices are switched on simultaneously and trigger the circuit breaker, although the device(s) are not faulty.

Therefore, never connect more than two devices via a ≤ 30 mA residual current-operated circuit breaker.

Continued on the next page

9. Specifications only for technicians and Klafs professionals - Installing the equipment

9.2. Electrical connection - Configuration

Continued

9.2.2 Setting a shorter tanning time



Caution!

Only a qualified electrician may make the adjustment. Disconnect the device from the mains.

If you prefer a shorter tanning time than 20 minutes (device setting ex-works), please set the required time on the timer switch (K2/K4) and on the safety timing relay (K3).

Adjust the K2/K4 timer switch to the required time (max. 20 minutes); then adjust the K3 safety timing relay to 110% of the time set on the K2 timer switch (e.g. K2/K4 timer switch: 10 minutes, K3 safety timing relay: 11 minutes).

To have access to the K2 timer switch and the K3 safety timing relay, move the device to a comfortable work position (see Section 5.3.) and remove the cover plate (16/1).

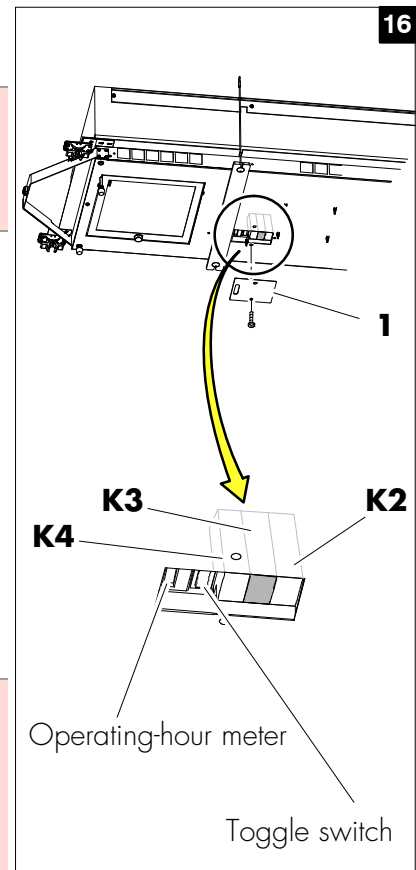
Now the K2 timer switch and the K3 safety timing relay are accessible.



Caution!

The maximum time set on the K2/K4 internal device timer switch is 20 minutes.

The time set on the K3 internal safety timing relay must not exceed 22 minutes.



Continued on the next page

9. Specifications only for technicians and Klafs professionals - Installing the equipment

9.2. Electrical connection - Configuration

Continued

9.2.3 Coin-operated timer



Caution!

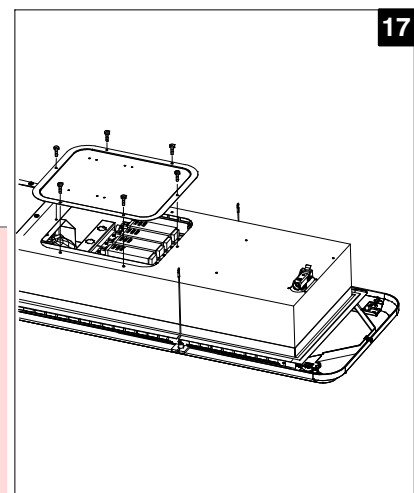
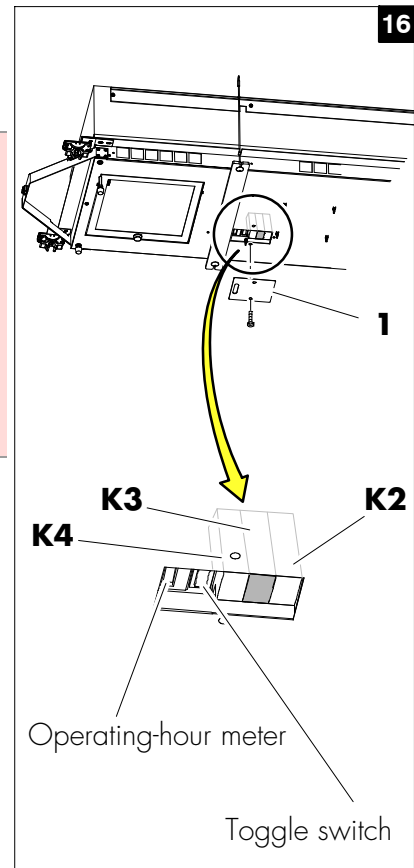
The connection must only be established by a qualified electrician in accordance with DIN VDE 0100. Disconnect the device from the mains. Switch interface/coin-operated timer/timer: 230 V 50 Hz, phase position same as supply voltage. See wiring diagram.

The run-time of the coin-operated timer or external timer switch must match the time set via the K2/K4 time relay on the tanning device (20 minutes ex-works). The K3 safety timing relay must then accordingly be set to 22 minutes (110 % of the K2/K4 time). If you prefer a shorter tanning time on the coin-operated timer than 20 minutes (device setting ex-works), please set the required time on the timer switch (K2/K4) and on the safety timing relay (K3). Adjust the K2/K4 timer switch to the same time as you set for the coin-operated timer and then adjust the K3 safety timing relay to 110 % of the time that you set on the K2/K4 timer switch (e.g. coin-operated timer and K2/K4 timer switch: 10 minutes, K3 safety timing relay: 11 minutes). To have access to both timing relays, move the device to a comfortable work position (see Section 5.3.) and remove the cover plate (16/1). Now the K2/K4 timer relay and the K3 safety timing relay are accessible.



Caution!

The time set on the external coin-operated timer or the external timer switch and the time set on the K2/K4 internal timer switch must not exceed 20 minutes. The time set on the K3 internal safety timing relay must not exceed 22 minutes.



Service chute

There are two service chutes (see Fig. 17) on the back of the SONNENWIESE for carrying out maintenance and repair work.

10. Technical data, wiring diagram, installation plans

Technical data, dimensions and UV type*

Description			SONNENWIESE
Device type			7824
Power	(W)		2980
Mains connection	(V)		1N PE~50 Hz 230 V
Fuse	(A)		16 A
Weight	(kg)		65
Dimensions:	Length	(mm)	2000
	Width	(mm)	490
	Height	(mm)	230
Safety class			IP 22
Noise emission			≤ 70 dB (A)
Ambient operating temperature			max. 35 °C
Humidity			≤ 90% rel. humidity, non-condensating

*Subject to technical change.

Lamp assembly	UV type according to EN 60335-2-27
3 x BQ 1177 Z4 C	3

We recommend replacing the high-intensity lamp after approx. 750 operating hours.

Extract from the tanning table

	Skin type II	Skin type III	Skin type IV
Maximum number of sessions per year	60 (\pm 15 kJ/m ²)	43 (\pm 15 kJ/m ²)	33 (\pm 15 kJ/m ²)

Lamp cover

In the device, the UV radiation sources are each covered with one XTT filter disk 322 interference (on the user side) (product code number 02935) and one transparent filter disk 316 (on the burner side) (product code number 02932).

A highly polished rolled reflector made from electropolished and anodized aluminium is found between the high-intensity lamps and the device carrier.

10. Technical data, wiring diagram, installation plans

Wiring diagram

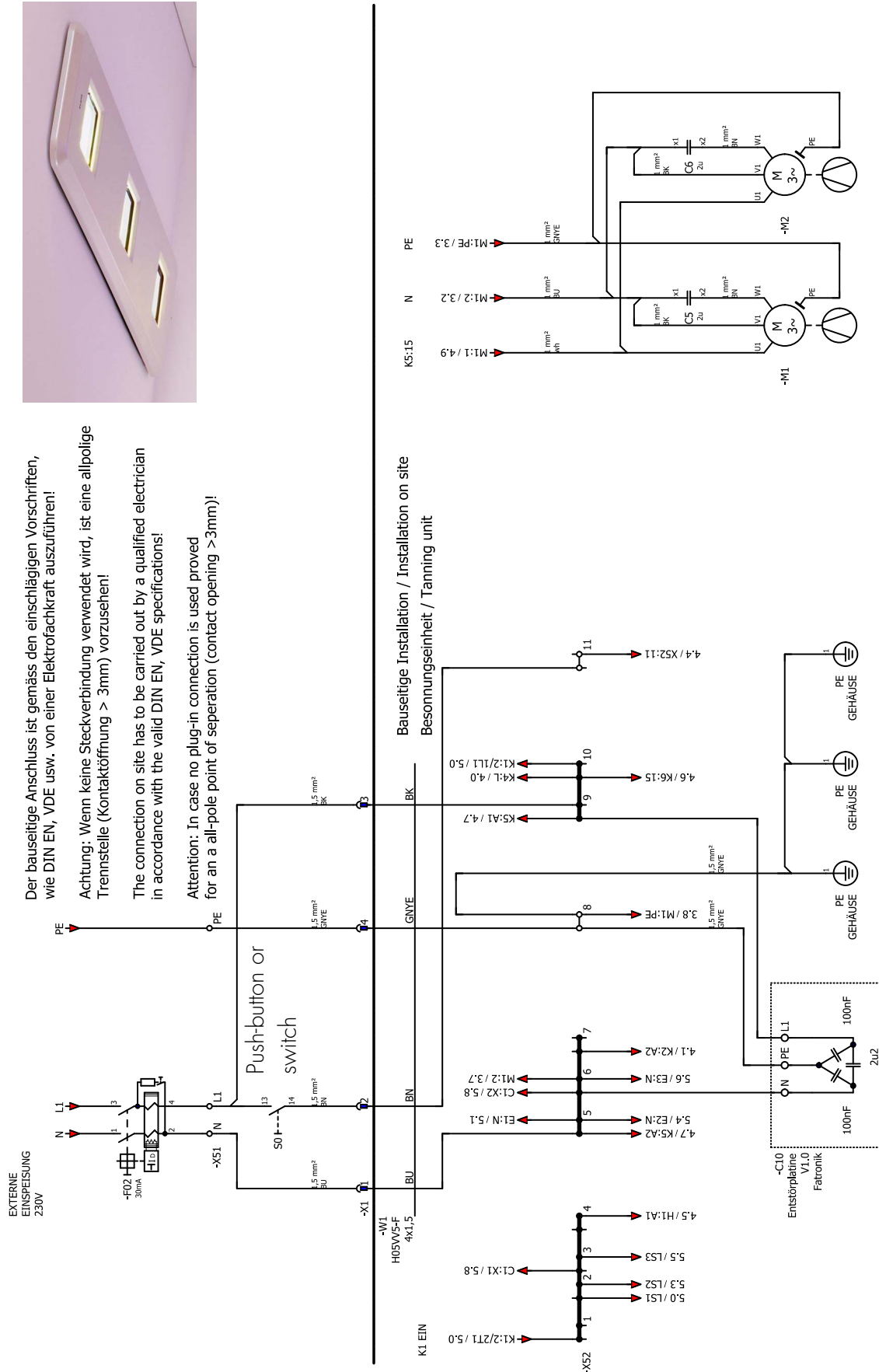


Der bauseitige Anschluss ist gemäss den einschlägigen Vorschriften, wie DIN EN, VDE usw. von einer Elektrofachkraft auszuführen!

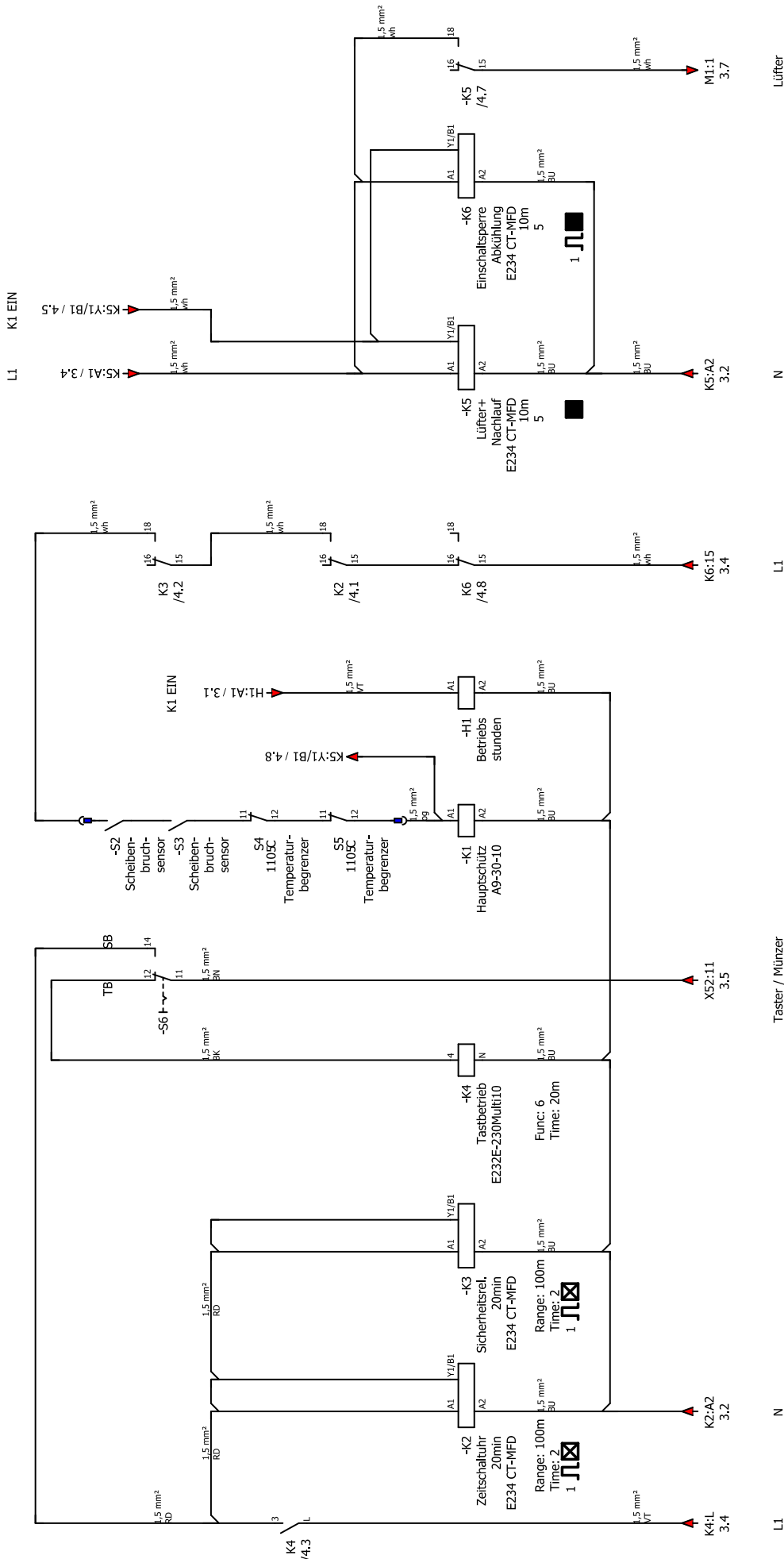
Achtung: Wenn keine Streckverbindung verwendet wird, ist eine allpolige Trennstelle (Kontaktöffnung > 3mm) vorzusehen!

The connection on site has to be carried out by a qualified electrician in accordance with the valid DIN EN, VDE specifications!

Attention: In case no plug-in connection is used proved for an all-pole point of separation (contact opening >3mm)!



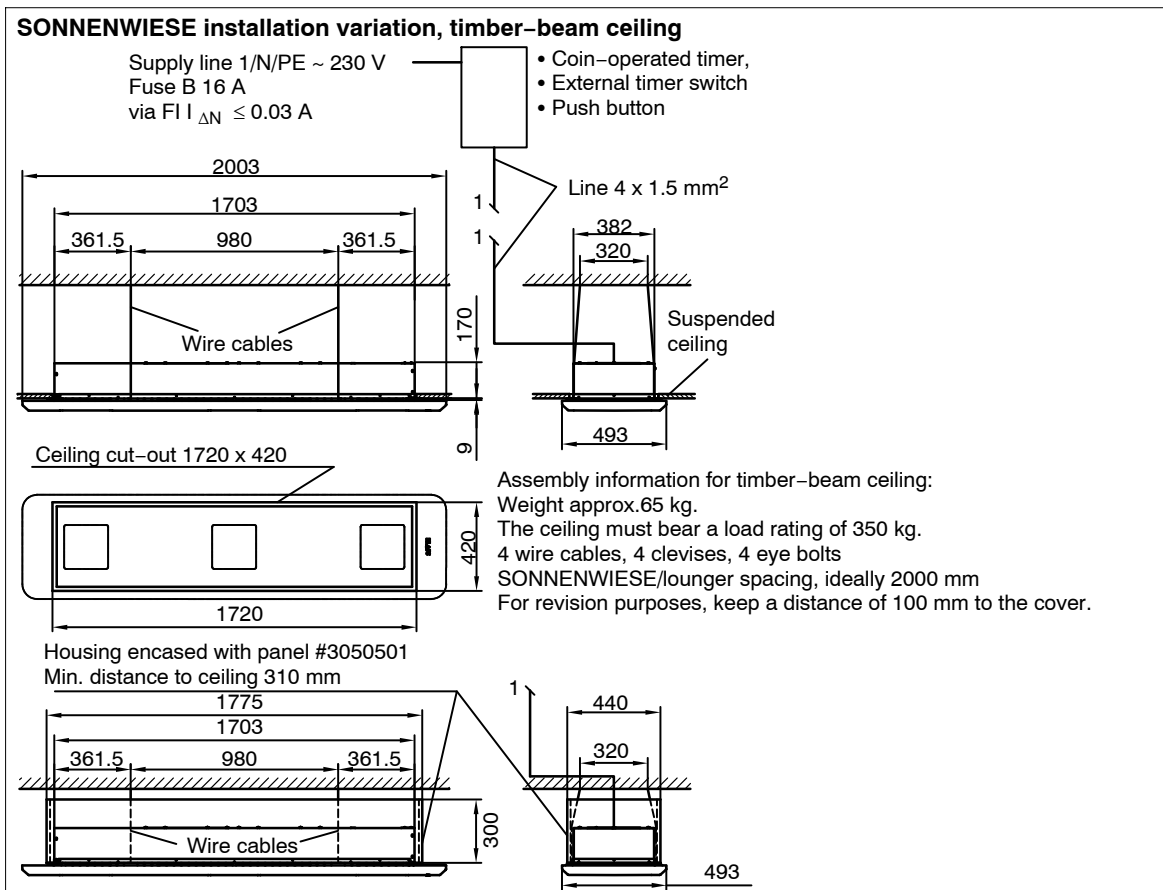
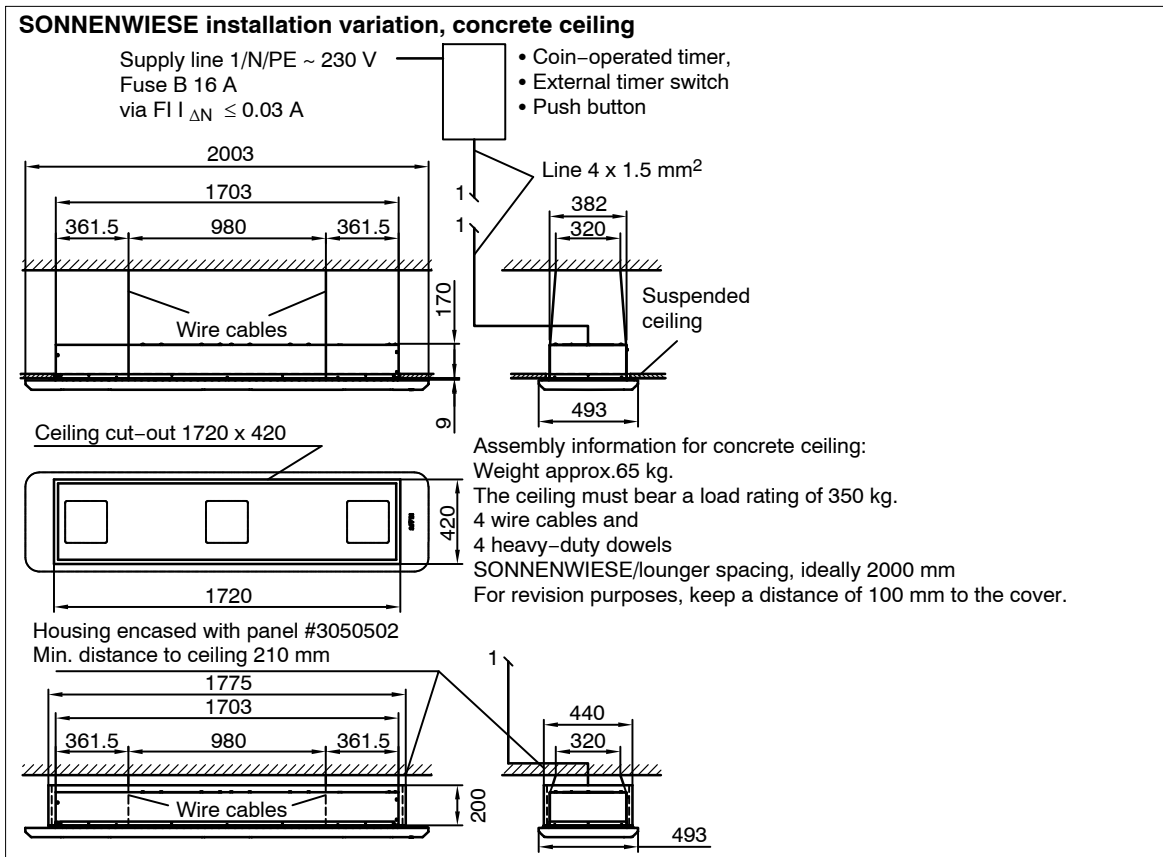
TB = Taster Betrieb mit Stromstoßschalter K4
SB = Schalt Betrieb z.B. Münzer EIN/AUS





10. Technical data, wiring diagram, installation plans

Installation plans for concrete ceiling, timber-beam ceiling



11. Addresses

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**We hope your "SONNENWIESE" will bring you lots of fun, well-being,
relaxation and regeneration.**

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