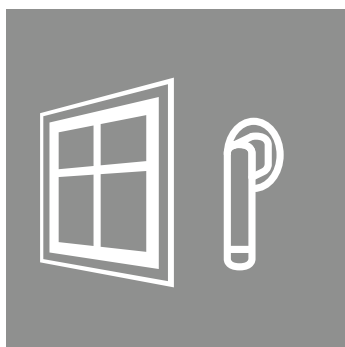


Art. No. 98459_03_EN/11.2022

Aluminium systems

Schüco windows

AWS turn/tilt unit

en

Operating instructions for consumers

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1. Notes on these instructions

1.1. Use and retention of the instructions

Before installing and commissioning, read through this manual thoroughly and adhere to the specified sequence of the instructions. Schüco International KG shall not be liable for any damage which arises from a failure to adhere to these instructions.

These instructions are part of the product. Keep them in an accessible place so that the information is always available.

2. Safety

2.1. About the safety instructions



KEY WORD

Type / source / consequence of the danger

Pictograms and key words advise of the type of danger and the level of danger:

DANGER		Imminent danger resulting in death or severe injuries.
WARNING		Potential imminent danger which may lead to death or severe injuries.
CAUTION		Potentially dangerous situation which may lead to minor injuries.
NOTE		Imminent danger of damage to property which may lead to damage to or destruction of the product or environment.
INFORMATION		Information Information, tips and advice

2.2. General safety instructions

Follow the safety instructions in this document so as not to endanger your own life or that of others and to ensure error-free operation.



DANGER

- When operating, note that unattended Schüco windows and doors may open and close due to external influences.

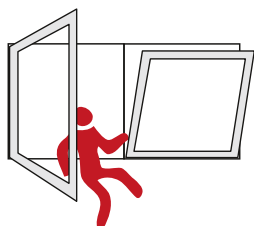
For reasons of simplicity, this manual does not contain every detail of all product types and it cannot cover every possible installation, operation or maintenance scenario.

If you have any questions, please contact your specialist fabricator or your local Schüco sales representative.



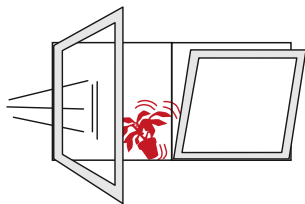
DANGER

When using aluminium units, take note of the hazards listed below.



Danger of falling

There is a risk of falling out of open units.
Do not leave open units unsupervised.

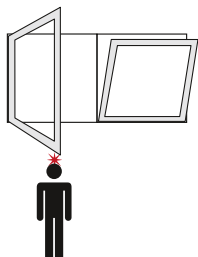


Danger of objects falling out when units slam shut

Danger of falling objects

Open units may slam in a draught which may knock over adjacent objects.

If there is wind or a draught, please shut windows and window vents.
Wind and draughts occur when windows or window door vents in the open position open and close independently and in an uncontrolled manner due to air pressure or suction.

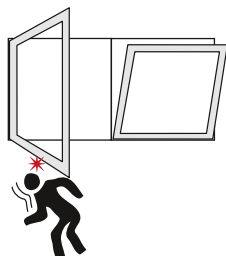


Danger of injury from vents swinging open

Turn/tilt units can unintentionally swing open when the stays are disengaged.

There is a risk of injury from turn/tilt windows swinging wide open during opening and closing.

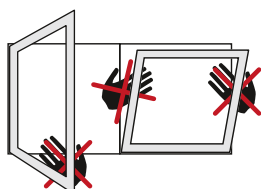
There is a risk of injury from open turn/tilt units when they are in the room (vent corners).



Risk of injury from open units

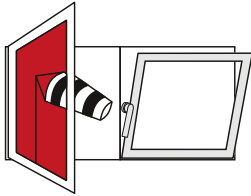
There is a high risk of injury when working underneath open windows.
Shut open windows before working underneath them and before children enter the room.

There is a risk of injury from open turn/tilt units when they are in the room (vent corners).



Danger of crushing

Be careful not to trap fingers between the window vent and the outer frame when operating windows as well as power-operated (automatic) windows.

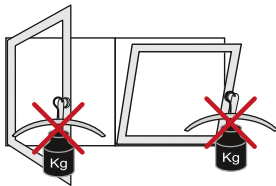


Risk of injury from wind

Uncontrolled opening and closing of an open window unit due to increased air movement/wind can damage profiles, fittings, glass and façades – and in the most severe cases even lead to the window vent falling out (may injure humans inside and outside the building).

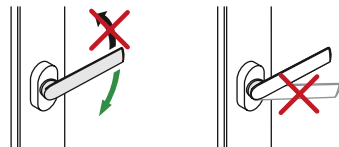
A combination of increased air movement and incorrect operation such as jamming the window vent (sustained opening + wind loads) is more likely to damage the fittings and thereby increase the risk of personal injury.

For this reason, close and lock window and window door units in the event of increased air movement/wind. Do not leave open windows unsupervised.



Do not load extra weight onto the frame or handles.

The additional load may cause deformation of the unit frame or damage to the unit handles.

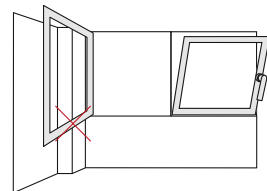


Operate the unit handles in the correct direction only and do not force them beyond the anti-turn stop.

The additional load may cause the unit handles to break.

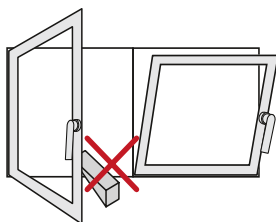
> Operate only in the closed position (of the vent).

The unit handles must not be moved to positions between the engagement points during opening and closing, as this can damage the fitting.



Do not rest the unit vents against projecting walls.

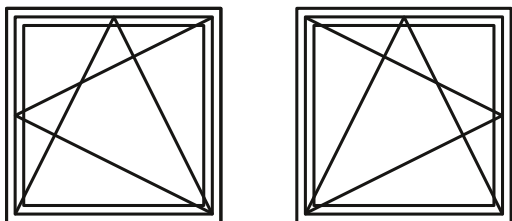
Damage to the leaves may be caused by draughts slamming the unit leaves open and shut.



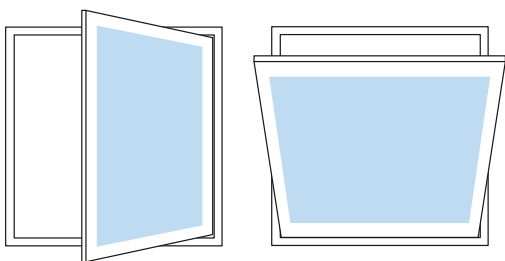
Do not wedge anything between the unit vent and unit frame.

The additional load can cause deformation of the unit frame and fittings. Fittings can be destroyed by excessive force.

2.3. Proper use



A side-hung and bottom-hung unit is fitted with components that allow the unit vent to be opened fully to the side by means of a horizontal rotation. In addition, the unit vent can be moved to the tilt position by rotating it vertically around the bottom axis.



The benefits of a turn/tilt unit:
The unit can be fully opened to the turn position for blast ventilation.
The unit can be opened to the tilt position for continuous ventilation.

Proper use also includes adhering to the installation and operating instructions. Any alternative use or a use beyond this remit is not in accordance with its purpose.

Incorrect use or unauthorised modification of the product may result in death or serious injury, or damage to the product and other material assets. Only original replacement parts may be used. The manufacturer / supplier shall not be liable for any damage resulting from infringement. The user alone bears the risk.

3. Operation

3.1. Operation of the turn/tilt unit

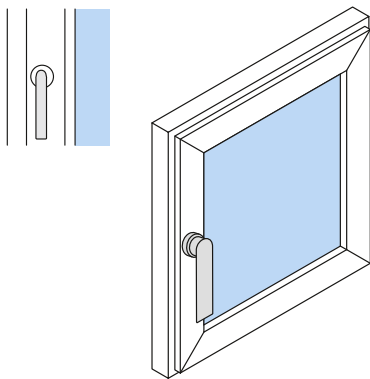
3.1.1. Open



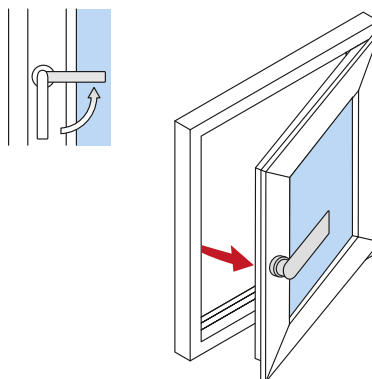
INFORMATION

The maximum opening width is determined by the planning requirements and may be relevant to safety aspects. The setting of the max. opening width therefore cannot be set by the end user.

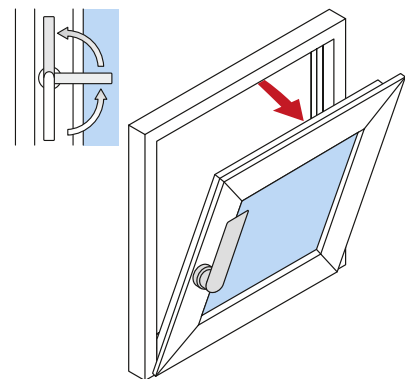
Closed position



Open position

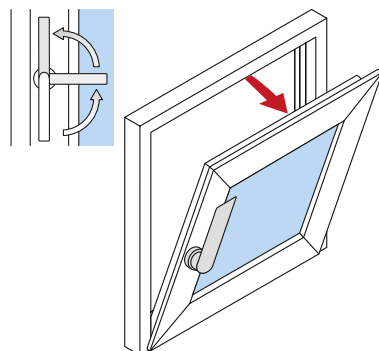


Tilt position



3.1.2. Ventilation

Tilt position



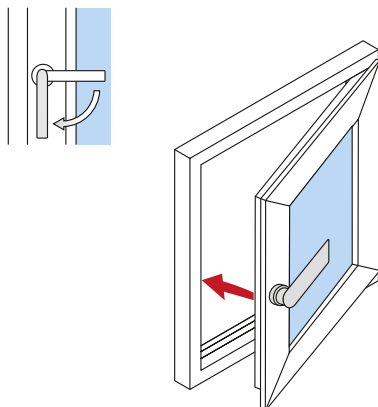
3.1.3. Close



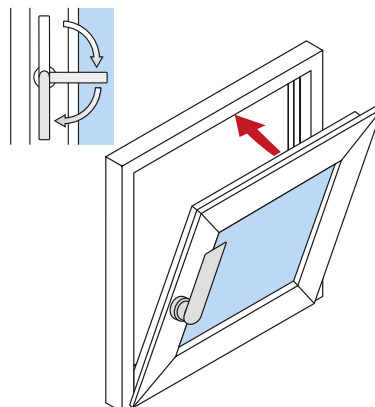
WARNING

If necessary, use the room-side vent frame to aid the closing process if there are large opening widths.

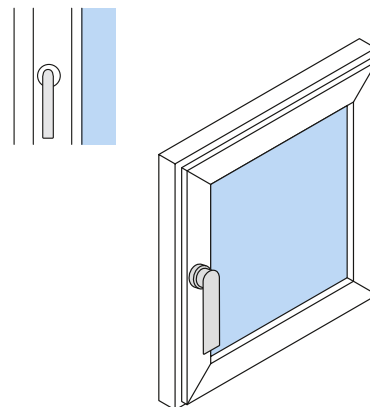
For open position



For tilt position

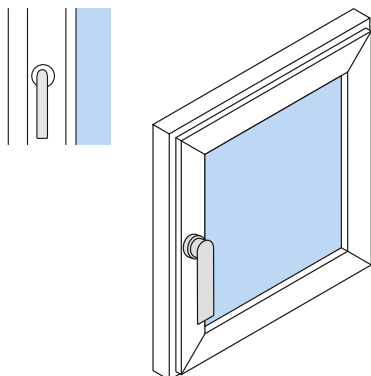


Closed position

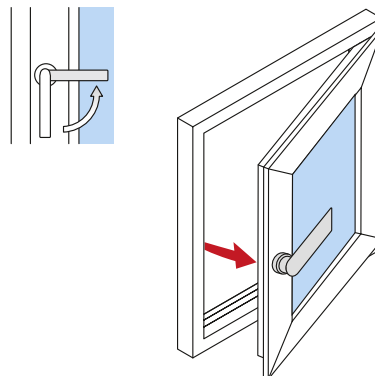


3.2. Operation of the side-hung unit

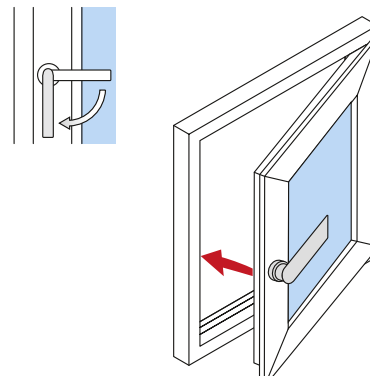
Closed position



Open



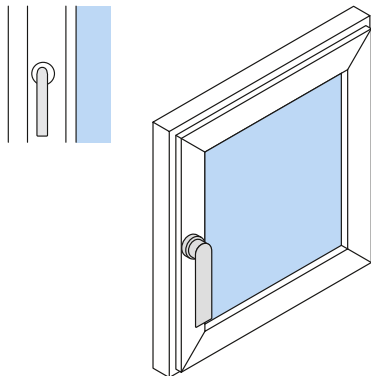
Close



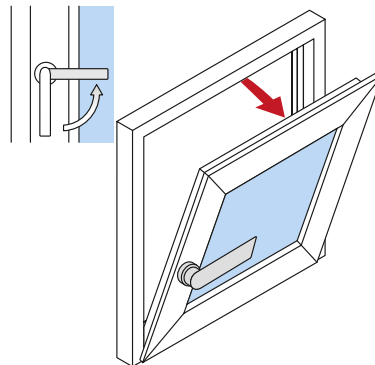
3.3. Operation of the tilt-before-turn unit

3.3.1. Open

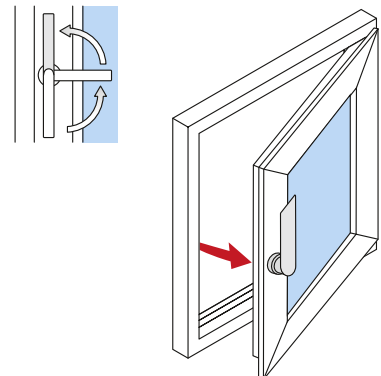
Closed position



Tilt position

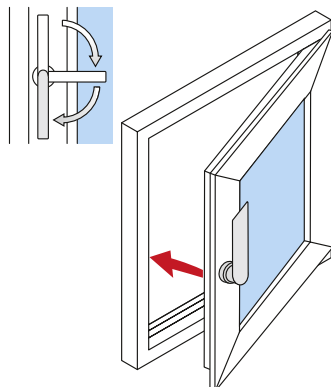


Turn position

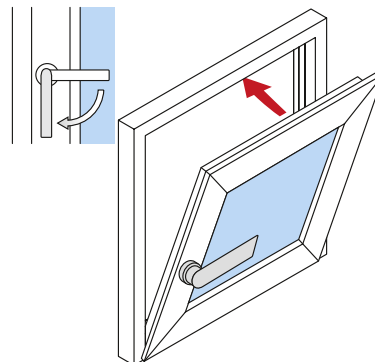


3.3.2. Close

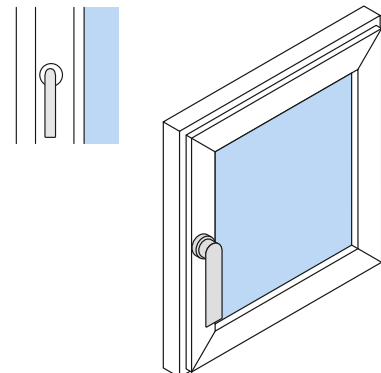
For turn position



For tilt position



Closed position



3.4. Correct ventilation

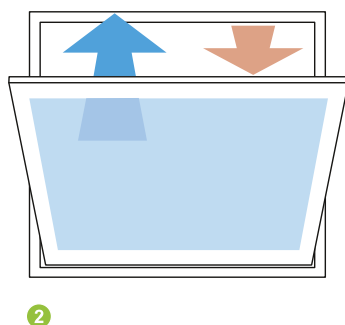
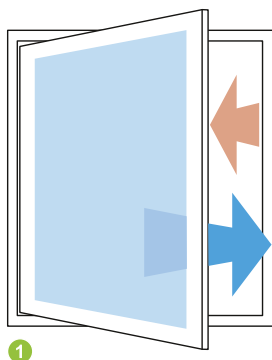
3.4.1. How to prevent damage caused by dampness

The high weathertightness of the AWS Schüco window systems reduces the exchange of air between the inside and outside. Depending on use, high humidity loads could occur. This is caused by evaporation from people and plants and facilities with high humidity levels such as bathrooms and kitchens.

The accumulation of water vapour leads to an increase in humidity and has to be let out to prevent damage caused by damp. The formation of condensation on materials that are not sensitive to water such as aluminium window frames and glass is permissible for a short time and in small quantities (DIN 4108-2). This phenomenon can be countered by sufficient ventilation.

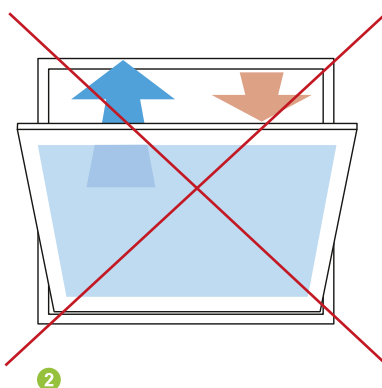
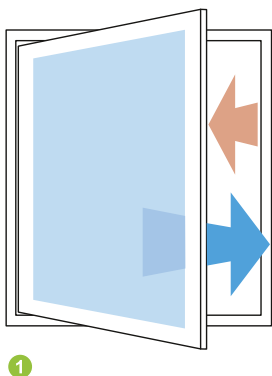
Ventilation in summer / winter

Summer



- 1 Short blast ventilation
- 2 Prolonged ventilation only when heating is switched off.

Winter



- 1 Short blast ventilation
- 2 Avoid continuous ventilation through tilted windows in winter to prevent the interior becoming too cold.

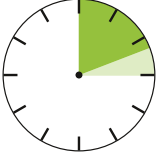
3.4.2. Blast ventilation

Depending on use, the window should be fully opened several times a day to ensure blast ventilation. As illustrated the perfect ventilation time depends on the time of year and should be in the range of 4–6 minutes in winter.

Blast ventilation ensures maximum protection against moisture damage. This effective exchange of damp air requires little heat energy as the interior barely cools down at all during the short period of ventilation.

The ventilation is even more economical if during ventilation the thermostat valve is turned off during ventilation and back on again after the windows are shut again.

Recommended duration of blast ventilation ¹ in the months:

December January February	4 - 6 minutes	
March November	8 - 10 minutes	
April October	12 - 15 minutes	
May September	16 - 20 minutes	
June July August	25 - 30 minutes	

Ventilation time required to exchange the air during blast ventilation (wide open window with no wind) depending on seasonal outside temperature.

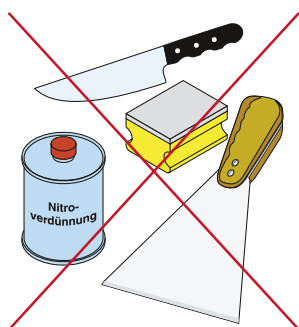
4. Maintenance

4.1. Cleaning and maintenance products



NOTE

When cleaning colour-coated units, observe the instructions for use of the cleaning agent.



The following items must NOT be used for cleaning:

- Tools with sharp edges, e.g. knives, metal scrapers, steel wool, the scouring side of household sponges etc. will damage surfaces.
- Aggressive cleaning fluids or solvents, e.g. cellulose thinner, nail polish remover etc. will also cause irreversible damage to unit surfaces.



Maintenance products suitable for aluminium units are available from Schüco specialists:

Aluminium maintenance kit 298 672:

- Cleaner and preservative
- Stainless steel cleaner
- Gasket cleaner
- Fittings spray
- Cleaning cloth

Maintenance products for anodised aluminium units:

Basic cleaner 298 181

For initial and basic cleaning.
Cleans and preserves the aluminium surface.

Metal polish 298 010

This cleaner for anodised surfaces restores the matt finish to the aluminium and preserves the surface (can also be used on stainless steel).

Universal aluminium cleaner 298 001

Removes stubborn grime, minor scuff marks and scratches.



4.2. General cleaning instructions



For the best window care, clean the window frames and gaskets at the same time as the window panes. Use a mild, non-scouring cleaning agent.

Solid substances

Plaster, mortar or similar is best removed using a wooden or plastic spatula.

Marks

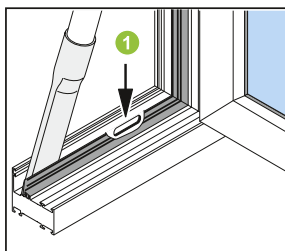
Can be removed safely and without residue using a cleaning agent from our range of cleaning products for aluminium units.



NOTE

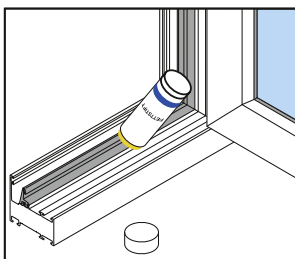
To prevent damage, observe the instructions for use given on the cleaning agent.

4.2.1. Cleaning the drainage slot



- Remove dust and dirt from the space between the gaskets and the external side of the frame using a vacuum cleaner.
- Blocked drainage slots can be cleaned using a cocktail stick or cotton bud ①.

4.2.2. Checking and lubricating gaskets



- Rub all gaskets with a grease stick or Vaseline. This will maintain suppleness and prevent sticking.
- At the same time, check all gaskets for damage.



NOTE

Ask a Schüco specialist to replace any defective gaskets.

4.3. Maintenance

4.3.1. Maintenance contract

If these operating instructions do not answer all your questions, refer to your Schüco specialist for help or contact Schüco directly. In addition to providing expert advice, they can advise you on particular modifications and repairs.

Schüco specialists and Schüco International KG can offer you the additional benefit of a maintenance contract. Under the terms of the maintenance agreement, they will undertake all maintenance and repair work. Your units will be maintained at their optimum functional performance and value without the need for additional resources.



NOTE

The fittings in the window, door and façade units require specialist, systematic maintenance, care and inspection to ensure they retain their value and remain fit for use and safe. Therefore, it is recommended that you conclude a corresponding maintenance contract for windows, doors and façades.



DANGER

- Risk of injury due to maintenance work carried out incorrectly.
- Incorrect maintenance could lead to severe injury or damage to property.



NOTE

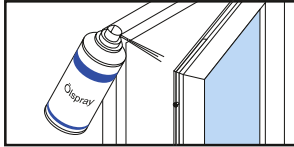
All repairs and modifications should be undertaken by a Schüco specialist or by Schüco International KG directly. Only repairs by a specialist using “original parts” ensure the continued correct operation of your Schüco units.

To conclude a maintenance contract with Schüco International KG, please contact Schüco directly:

Tel. +49 521 783 1111

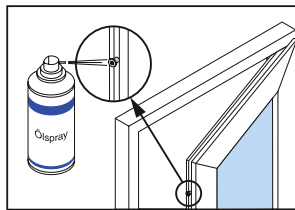
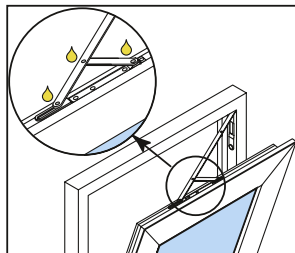
serviceteam@schueco.com

4.3.2. Maintenance of fittings components



All moving parts of the fittings in your Schüco units are virtually maintenance free. However, a little acid-free oil and grease keep the mechanics smooth and ensure user comfort for a long period. Spray the locking pins and the positioning points of the tilt stay with the lubricant spray from the Schüco range.

Only a light application is required at all points.
To avoid contamination, wipe off excess lubricant after lubrication.



NOTE

- AvanTec SimplySmart plastic and hybrid locking bars do not require maintenance.
- Schüco fittings are generally lubricated in the factory. We recommend that any lubrication, maintenance and adjustment work is carried out at least once a year by a qualified specialist.
- Fittings components with an additional positioning and stop function, e.g. energy-absorbing limiting stays or vent brakes, must not be lubricated or oiled.



If required, Schüco fittings can be maintained with an acid and resin-free oil.

Lubricant spray 298 741 Grease 298 118

Maintenance work to be performed at least once a year (in school and hotel buildings every six months):

- Ensure fittings components are secure and check for any signs of wear. If required, tighten fixing screws and have a specialist company replace worn components.
- Grease all moving parts and locking parts of the fittings and check for proper functioning.

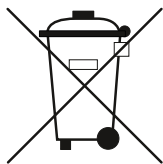
5. Decommissioning and disposal

5.1. Decommissioning

Commission a specialist to remove the units professionally.

5.2. Disposal

Commission a specialist to dispose of the units professionally.



The materials used can be recycled. Observe the environmental requirements with regard to recycling, re-use and disposal of operating materials and components in accordance with the local, country-specific and international current technical regulations and official regulations. Make a contribution towards protecting our environment and dispose of the units at a collection point.

en

Original operating instructions

Schüco International KG
Karolinenstraße 1-15
33609 Bielefeld
Tel. +49 (0)521 783-0
Fax +49 (0)521 783-451
www.schueco.com

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