

Operation Manual

s: 211 E DA, s: 201 and s: 203



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These instructions are also available in German and French.

The original language is $\operatorname{\mathsf{German}}$.

MARNING: The Operation Manual must be stored and made accessible to the user of the window.







s: 211 E DA s: 201 s: 203

Product information and usage following regulations

Target group

These instructions are addressed to people who are briefed in the use of the products s: 211 E DA, s: 201, and s: 203 for natural ventilation via windows and who know the operating modes and the residual risk of the product. This product is not intended for the use by people (including children) with a lack of experience or knowledge unless they are supervised by a person responsible for their safety or are instructed by the said person regarding the use of the product. Children must be monitored to ensure that they are not playing with the product. The product is not a toy. Cleaning and user maintenance may not be conducted by children (without them being supervised). Children may not play with stationary mounted control devices and equipment. Remote controls must be stored/installed beyond the reach of children.

Remarks regarding product liability

According to the product liability act's definition of the manufacturer's liability for their products, the following notes and maintenance specification must be adhered to. Not observing the indications and non-compliance with the instructions can void the product liability but also cause personal injuries as well as high property damages.

Intended use

Following, an explanation can be found that details how to use roof exits and roof windows with the corresponding fittings, for which they have been exclusively designed and constructed, in accordance with regulations. One aspect of such use in accordance with regulations is compliance with instructions in the instruction manual.

In case of winds and draught, the roof exits and roof windows must be closed. Winds and draught as defined here occur when the roof exit opens or closes due to air pressure or air suction. A roof exit that is open and that has a motorized driver may not be laden with weight from the outside and only be closed by using the controls. Forced closure of the open window can lead to driver damages and injuries.

A DANGER:

Caution:

Improper opening and closing of the sashes can lead to a risk of injury and damage to property!

Improper opening and closing of the sashes can lead to severe injuries and extensive damage to property.

Hence:

- Make sure to advance the roof exit to the base frame, the buffer limiting the opening or other sashes at very low speed within its entire range of movement to its position of complete closure or opening.
- Make sure that the sash never slams shut or swings open uncontrollably.
- Never handle the motorized window drivers unsupervised or without a view of the element. Risk of personal injuries as well as extensive property damages from entrapment!

The roof exit and the roof window serve as the thermal separation between outdoor and indoor climate conditions and enable controlled opening, for example for different ventilation positions. You can move the window or the roof exit into an opening position by operating a hand lever or a motorized driver.

Product description

Our roof exits and roof windows can be integrated into existing roof constructions – even in inaccessible areas. Thanks to the narrow construction, our products are very elegant and very durable, due to high-quality materials and parts. From the outside, the roof exits and roof windows by s: stebler blend into the roof unobtrusively – without a protrusive frame, a noticeable structure or distinctive window pane. Fall protection around the roof exit is mandatory. Stepping on the glass is forbidden. Risk of falling through fragile roof material!

MARNING:

Do not operate the window or the roof exit while repair or adjustment work is being done on it. It should be specifically noted again that when cleaning you must adhere to the safety precautions, especially regarding turning off the controls and taking precautions against an unintentional restoration of electrical power. As soon as the controls are cut off from the electrical power grid, take particular care to ensure that any existent emergency power supply is also cut off from the controls. Risk of injury may result from the automatic movement of the engines.

▲ DANGER:

Risk of injury from electric shock. An authorized specialist must install all electrical connections to the 230V grid as well as all connections of the remote control and its accessories.

Designated use/misuse

Intended Use:

Roof exits and roof windows are designed

- for motorized opening and closing
- for automated opening and closing*
- as a ventilation element
- as an isolating element
- * Automatic controls may only be installed in combination with anti-trapping protection inside as well as outside (including external open/close button).

Misuse:

- Overexpansion of the fittings when it is windy. In windy weather, the window must be closed.
- Capacity overload when opening (snow etc.).
- Opening when it is rainy (oversteering of the rain sensor or none available).
- Electrical contact (in the area of the controls, drive parts).
- Operation by people in need of protection/people with handicaps/ children etc.
- Stepping on the window (risk of falling through fragile material).
- Foreign objects damage the structure on opening and closing.
- Reprogramming of control settings (such as engine alignment, parameters) leads to malfunction of the product and endangers all users.
- Poor/no maintenance can lead to consequential damages.
 Maintenance must be performed according to maintenance rules and instructions.
- Use of wrong lubricants compromises operational and functional reliability to a high degree.
- Use of wrong cleaning agents can cause lasting damage to the seals, the glass and the window structure.

MARNING:

The use of the roof exits and windows must observe the intended use as detailed on page 3 within the usage limits. Any other or further use is not deemed as "intended use."

MARNING:

Limits of use: time limits/expected useful life

Drives:

s:211E DA +/- 8 years or 10 000 cycles +10 °C to +45 °C s:201/s:203 +/- 8 years or 10 000 cycles +10 °C to +45 °C s:203 RWA +/- 8 years or 11 000 cycles -15 °C to +45 °C

Comfort controls and their components:

+/- 10 years or > 10 000 cycles +10 °C to +70 °C

Motor controls and their components:

- switch-on time max. 1 minute per 9 minutes > 10000 cycles and/or 10 years
- anti-trap protection light grid –10 °C to +70 °C, 6 years

Double glazing, horizontal: 10 years

Roofing frame sheet metal: Copper/titanium-zinc about 10 years

Frame and sash profiles: 10 years

Gaskets: 5 years

Operation

- 1. Completely install roof exit and roof windows > assembly instructions
- 2. Have controls including the rain sensor professionally installed and connected by an electrician > assembly instructions
- 3. Install and connect anti-trap protection if available > instruction manual controls/crush protection
- 4. Connect motors with the controls
 - > controls manual
- 5. Verify that the roof exit can freely be opened and closed before initiating the first opening and closing > operation manual
- 6. Open and close the roof exit or window by using the operating elements > operation manual

MARNING:

The anti-trap protection or dead man's switch is mandatory as soon as the product has been installed within reach.

Press the "up" or "down" button on the controls for opening and closing. Additionally, please observe the separate operation manual for the controls. After having installed the roof exit, you need to attach fall protection around the roof exit. Do not step on the sash. Risk of falling through fragile material!

The construction should not make any unusual noises. In case of an uneven running performance, stop operation immediately and close the roof exit/ window, if possible. The movable parts can be maintained by using lubricants such as Kluber grease Staburags NBU 12 or WD40. Gaskets and silicone joints should be checked biannually and replaced if necessary.

MARNING:

When opening the window or roof exit, no objects, snow/ice or water may be on the window glass. When closing the window or roof exit, you must ensure that no objects or body parts are within clamping range. In case of sub-zero temperatures, the gaskets can start sticking and be damaged when opening the window.

Ventilation

The motorized roof exits and windows by s: stebler are continuously adjustable and therefore support healthy ventilation behavior. It is recommended to open the window slightly several times per day to exchange the indoor air. In case of outdoor temperatures at or below 0 °C and high indoor humidity levels, condensation can form on the window frame or the glass edges. In this case, regular window gap ventilation and possible monitoring of the inside air humidity are recommended. When used within reach of moisture-prone areas (shower/bath), the danger of condensation on the frame and glass increases. Additional large-scale ventilation is then imperative.

Cleaning

Roof window panes can be cleaned from the inside and outside. To do so, open the sash/louvers all the way and wipe off both sides with neutral cleansing agent and water. Check grout and gasket fittings biannually and clean with an adequate rubber cleansing agent. The model s: 203 also requires cleaning of the mechanics of the connecting rod. This can be done with a vacuum cleaner when the window is open.

▲ DANGER:

It should be specifically noted again that when cleaning you must adhere to the safety precautions, especially regarding turning off the controls and taking precautions against an unintentional restoration of electrical power. As soon as the controls are cut off from the electrical power grid, take particular care to ensure that any existent emergency power supply is also cut off from the controls. Risk of injury may result from the automatic movement of the engines.

The rain sensor must be cleaned biannually with a damp cloth it is imperative to disconnect the power unit and controls from the electric circuit.



▲ DANGER:

The window closes automatically when rain sensor gets wet.

Leaves and other foreign objects should be removed from the covering frame around the roof exit biannually to ensure drainage of the

rainwater. Cleaning from the outside must be performed according to the national or cantonal guidelines.

Remove snow and ice from the window or roof exit to ensure drainage of meltwater. Work at an elevated level/height only with the necessary personal protection clothes against fall from heights or collective protection following the national (or regional) guidelines.

A DANGER:

Do not step on or walk on windows/roof exits. Risk of falling through fragile material! Do not step on or walk on windows/roof exits for cleaning or servicing.

Maintenance and care

O CAUTION:		
What to do?	Interval	Deadline
First inspection	After having reached the maximum cycles/ year	at the latest after 1 year
Annual inspection	After having reached the maximum cycles/year	Annually
Replacement of emergency power supply	After error message from the battery package	at the latest after 3 years
Replacement of power unit	After about 10.000 cycles	at the latest after 8 years

Servicing

Check the mechanics for damage, contamination and squeaking noises after the construction phase. Clean the mechanics thoroughly and lubricate with Kluber grease Staburags NBU 12 or at least WD 40. Thoroughly clean the gasket lips, the EPDM (black) and the silicone seals (gray) with lukewarm water and treat with silicone spray or a silicone stick. Rinse the glass with plenty of water without rubbing and then clean it with a little bit of window cleaner both inside and outside. Do not use silicone cleaners, acetone, diluters or chemicals, as they will affect the silicone joints and seals. Wipe down glasses with a microfiber cloth. Perform all work following the official or national and regional guidelines.

General care and maintenance tips

- Lubricate once per year
- Clean glasses at least twice per year
- Always wipe down in rolling and sliding direction
- Clean by applying only modest pressure
- Do not use circular motions
- Do not use overly abrasive agents
- Do not use highly alkaline or acidic cleaners always rinse with plenty of water
- Use distilled water or mineral water for the last rinse-off (avoids streaking)
- Wipe off with a squeegee and dry off with a clean cotton cloth or suitable paper towels

Anodized aluminum	Powder-coated aluminum/steel	Stainless steel	Glass/Perspex	Rubber/silicone
Wipe off with a dry cotton cloth without applying any pressure or remove with a sponge and water or anodic cleaning agent, and subsequently dry with a clean cloth.	Wipe off with a dry cotton cloth without applying any pressure or remove with a sponge and water or anodic cleaning agent, and subsequently dry with a clean cloth.	Wipe off with a dry cotton cloth without applying any pressure or remove with a sponge and water or anodic cleaning agent, and subsequently dry with a clean cloth.	Wipe off with a dry cotton cloth without applying any pressure or remove with a sponge and water or anodic cleaning agent, and subsequently dry with a clean cloth.	Wipe off with a dry cotton cloth without applying any pressure or remove with a sponge and water or anodic cleaning agent, and subsequently dry with a clean cloth.
Thoroughly remove by using a suitable solvent, e.g., acetone, anodic cleaning agent, silicone remover and a clean cotton cloth.	Thoroughly remove by using a suitable solvent, e.g., ethyl alcohol and a clean cotton cloth (can result in dulling of the surface).	Thoroughly remove by using a suitable solvent and a clean cotton cloth.	Thoroughly remove by using plenty of lukewarm water and, if necessary, a little bit of acetone. Only rub very moderately.	Thoroughly remove by using plenty of lukewarm water and, if necessary, a little bit of acetone or silicone cleaner. Only rub very moderately. (Risk of dissolution).
Remove immediately by using a sponge or a soft brush before the material becomes dry to the touch. Clean under running water and subsequently dry with a clean cloth.	Thoroughly remove by using a suitable solvent, e.g., ethyl alcohol and a clean cotton cloth (can result in dulling of the surface).	Thoroughly remove by using a suitable solvent, e.g., ethyl alcohol and a clean cotton cloth (can result in dulling of the surface).	Thoroughly remove by using a suitable solvent, e.g., ethyl alcohol and a clean cotton cloth (can result in dulling of the surface).	Thoroughly remove by using plenty of lukewarm water and, if necessary, a little bit of acetone or silicone cleaner. Only rub very moderately. (Risk of dissolution).
Flush with plenty of water. Clean with neutral cleaning agents, anodic cleaning agent and sponge (no mechanical cleaning). Rinse thoroughly and dry.	Flush with plenty of water. Clean with neutral car shampoo and sponge (no mechanical, abrasive cleaning). Rinse thoroughly and dry.	Flush with plenty of water. Clean with neutral car shampoo and sponge (no mechanical, abrasive cleaning). Rinse thoroughly and dry.		
Flush with plenty of water. Clean with neutral cleaning agent and sponge. Rinse thoroughly and dry.	Flush with plenty of water. Clean with neutral cleaning agent and sponge. Rinse thoroughly and dry.	Flush with plenty of water. Clean with neutral cleaning agent and sponge. Rinse thoroughly and dry.	Flush with plenty of water. Clean with neutral cleaning agent and sponge. Rinse thoroughly and dry.	Flush with plenty of water. Clean with neutral cleaning agent and sponge. Rinse thoroughly and dry.
Clean once as described above in case of "contamination (general)," then apply polish.	Clean once as described above in case of "contamina- tion (general)," then apply polish.	Clean once as described above in case of "contamination (general)," then apply polish.	Clean once as described above in case of "contamina- tion (general)," then apply polish.	Clean once as described above in case of "contamina- tion (general)," then apply rubber care product.
	cloth without applying any pressure or remove with a sponge and water or anodic cleaning agent, and subsequently dry with a clean cloth. Thoroughly remove by using a suitable solvent, e.g., acetone, anodic cleaning agent, silicone remover and a clean cotton cloth. Remove immediately by using a sponge or a soft brush before the material becomes dry to the touch. Clean under running water and subsequently dry with a clean cloth. Flush with plenty of water. Clean with neutral cleaning agents, anodic cleaning agent and sponge (no mechanical cleaning). Rinse thoroughly and dry. Flush with plenty of water. Clean with neutral cleaning agent and sponge. Rinse thoroughly and dry. Clean once as described above in case of "contamination (general)," then apply	Wipe off with a dry cotton cloth without applying any pressure or remove with a sponge and water or anodic cleaning agent, and subsequently dry with a clean cloth. 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Anodic cleaning agent

An anodic cleaning agent cleans, preserves and conserves in a single process. The moderate abrasive effect guarantees the best cleaning while protecting the surface to the highest degree possible. Anodic cleaning agents are available through us in 0.2-liter and 0.5-liter containers.



MARNING:

Do not operate the window while repair or adjustment work is being done on it.

A DANGER:

When doing maintenance, you are explicitly asked to adhere to the safety precautions, especially regarding turning off the controls and taking precautions against an unintentional restoration of electrical power. As soon as the controls are cut off from the electrical power grid, take particular care to ensure that any existent emergency power supply is also cut off from the controls. Risk of injury may result from $% \left(1\right) =\left(1\right) \left(1\right) \left$ the automatic movement of the engines.

Troubleshooting

Should you experience problems of any kind, you are welcome to contact our general office at +41 62 388 42 42 or send an email to info@stebler.ch

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REMARKS:

We tested our product (internal production control) in its standard configuration (factory setting as delivered). Only employees of stebler glashaus ag may change the configuration. Any changes to or adjustment of the configuration by an entity other than stebler glashaus ag require a review of the correct functioning. Liability and warranty claims do not apply to errors resulting from an incorrect configuration.

Warranty and customer service

The warranty extends to material and manufacturing defects that show up as part of intended use (see page 3). The warranty for material supplies lasts for 12 months. Warranty and liability claims for bodily injury or property damage are void if they are a result of one or several of the following causes:

- Changes to the motors or the weather station configuration
- Improper use of the product
- Incorrect assembly, commissioning, operation, maintenance or product repair
- Operation of products if safety devices are defective or if safety and protective equipment items are incorrectly fitted or inoperable
- Non-compliance with the remarks and the assembly requirements
- Unauthorized structural alterations of the product's power unit or the parts
- Impact of foreign objects and force majeure
- Wear and tear

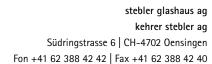
In case of possible warranty claims or when ordering spare parts or accessories, please contact the company stebler glashaus ag
Südringstrasse 6
4702 Oensingen

Disclaimer

Switzerland

The warranty and liability of the supplier excludes damages that:

- were not caused by the buyer; verifiably faulty material; faulty construction; or poor workmanship.
- were caused by wear and tear; poor maintenance; disregard of operating instructions; excessive operational demands; improper equipment; chemical or electrolytic influences; construction or assembly work not conducted by the supplier.
- were caused by other factors outside of the supplier's responsibility.



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