Concealed motion chain drive.
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1. Information

1.1 Safety information and hazard warnings

- Before installing and using the DRIVE axxent DK, please read these instructions carefully. Observe the warnings and specific hazard information.
- After the installation of the DRIVE axxent DK, these operating instructions must be handed over to the user, and the user/owner of the building must be briefed accordingly.
- All work in conjunction with the installation and commissioning of the DRIVE axxent DK is to be performed by experienced professionals with training and practice in the assembly, installation and maintenance of window hardware and motion chain drives and who are aware of the applicable accident prevention regulations and occupational safety directives. You must comply with the applicable regulations governing mechanical and electrical work and follow the safety instructions in our product documentation.
- This unit can be used by children aged 8 and above as well as by people with physical, sensory or mental difficulties or with a lack of experience and knowledge as long as they are supervised or have been instructed in how to use the unit safely and understand the resulting risks. Children must not play with the unit. Cleaning and user maintenance must not be carried out by children without supervision.

**WARNING**

Risk of injury or fatal injury! Hands, arms, legs and feet can get trapped and/or crushed in systems driven by an electric motor.

To prevent personal injury or damage to property, always comply with the following instructions:

- If the window is installed in an accessible area, e.g. at a height of less than 2.5 m (lower window edge), the appropriate measures must be taken to ensure that no persons are put in danger if they accidentally find themselves in such areas. It is essential to ensure the following precautionary measures in case of automatic control of the window (storage operation in OFF-direction, weather automatic control etc.):
  - Safety edges, contact hoses, light barriers which automatically stop the drive in case of crushing hazard.
  - Grilles or other mechanical devices that prevent reaching into the hazardous zone.
  - Operation via key button or key-operated push button by an authorised person with eye contact to the actuated window. See ASR-A1-6 guidelines for power-operated windows, doors and gates.
- For tilted sashes, a safety stay must be mounted in addition to the window drive, which secures the tilting of the window sash after the lift-off of the drive, e.g. for cleaning windows (arresting position), and secures the sash against tilting down. This arresting position must be somewhat larger than the opening width of the drive. The safety stay must be mounted before commencing the installation of the drive!
- Electrically actuated windows and flaps must be constructed in such a way that they do not protrude into access routes in buildings when either open or closed. Level-access openings must be secured against falling.
- If there is a hazard of falling glass, the glass used must be laminated safety glass (VSG).
- If the ventilation flaps could be exposed to heavy wind loads, the control centre must be connected to a wind sensor that ensures the automatic closing of the flaps.
- In automatic operation, the drive is stopped via the limit switch or overload cut-off device.
1.2 Intended use

- DRIVE axxent DK is a concealed motion chain drive that may only be used for the motorised tilting and the closing of turn/tilt windows from their tilted position.
- The drive can be controlled via a wall button or an optional remote control.

Commissioning

- DRIVE axxent DK is an incomplete machine that must not be commissioned until it has been incorporated in a power-operated window as a complete machine and has been approved in accordance with the manufacturer’s specifications.

Installation location and suitable hardware and window systems

- DRIVE axxent DK is exclusively intended for installation in vertical turn/tilt windows made of timber, PVC or aluminium in fixed buildings. The device must be installed in the window frame at the top of the locking side by qualified professionals and in accordance with the installation instructions provided.
- PVC profile with an airgap of 12 +1 mm
- Timber profile with an airgap of 12 +1 mm and a Eurofalz of min. 30 mm
- for aluminium profiles with LM eurogroove and a cavity of 21 +1mm
- Hardware systems SIEGENIA Titan AF and LM 4200:

  Sash outer dimensions (sash width):
  - Areas: timber and PVC TITAN AF (sash rebate) min. 850 mm - max. 1560 mm
  - Area: aluminium LM 4200 top stay size 20 (sash width) min. 835 mm - max. 980 mm
  - Area: aluminium LM 4200 top stay size 35 (sash width) min. 981 mm - max. 1600 mm

  Top stay opening width:
  - Areas: timber and PVC TITAN AF max. 150 mm
  - Area: aluminium top stay LM 4200 size 20 min. 120 mm
  - Area: aluminium top stay LM 4200 size 35 min. 150 mm

- Sash weights up to 130 kg (the application diagrams of the respective hinges must be observed)
- DRIVE axxent DK is only to be used if it is in a technically sound condition, and no modifications may be made to the unit and/or its components.
- DRIVE axxent DK must only be used in conjunction with genuine accessories and hardware approved by SIEGENIA.
- DRIVE axxent DK is suitable only for installation in dry rooms (protection class IP20) and permissible operating temperatures of -20 °C to +40 °C
- In the event of a fault, have DRIVE axxent DK checked and repaired by experienced specialists only.
- The system is designed only for occasional manual operation.
- Any other use is considered as improper use.

1.3 Improper use

- DRIVE axxent DK may not be used as a drive of smoke and heat control systems in windows.
- DRIVE axxent DK may not be used in windows that are intended as emergency exits.
- Do not use levers with lock-in position, but use only removable levers of the Si-line with Si-line rose.
- Any use of this product that is not in accordance with its intended use, or any adaptation of or modification to the product and its associated components for which the express consent of SIEGENIA has not been obtained, is strictly prohibited.
- SIEGENIA accepts no liability whatsoever for any material losses or injury to people caused by failure to comply with this stipulation.
1.4 On-site risk analysis in the planning phase

Power window elements imply the risk of crushing and shearing. Depending on the individual property and conditions of use (e.g., in case of persons requiring special protection or commercial properties), you must carry out a risk and hazard analysis during the planning phase in accordance with VFF data sheet KB.01 and the current machinery directive or other applicable national regulations relating to the safety equipment and installation location. A risk analysis provides you with all the information needed to assess risks and make decisions concerning the safety of the window elements.

1.5 Instructions for assembly and installation

The applicable national and international regulations concerning mechanical and electrical work as well as the document provided by us must be observed when performing any installation and commissioning of the DRIVE axxent DK.

- Install DRIVE axxent DK in its intended installation position and in accordance with the installation directives applicable on site.
- During cable routing, avoid damage to the cables caused by pinching, bending or pulling.
- Lines for the DRIVE axxent DK routed in-wall must be connected in branch boxes (keep branch boxes accessible for maintenance).
- Protect DRIVE axxent DK against contamination by site material and humidity.
- All fittings must be mounted properly.
- Connect to the mains supply only after you have tested for proper mechanical function.
- Observe the applicable fabrication guidelines from the profile manufacturer.
- Always observe all safety precautions provided in these instructions and make sure that these instructions are at accessible at all times.

Note: Due to its motion speed, the DRIVE axxent DK complies with the requirements of protection class 0 to 3 according to VFF data sheet KB.01 without any additional protection measures.

Dimensions

- All dimensions given in this documentation are in mm.

Illustrations

- All illustrations are shown in DIN right, DIN left is a mirror image.

Note concerning the infrared remote control function

- Intense solar radiation and light incidence can reduce the range of the infrared remote control.
1.6 Scope of delivery

<table>
<thead>
<tr>
<th>No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DRIVE axxent DK</td>
</tr>
<tr>
<td>2</td>
<td>Clamping spring</td>
</tr>
<tr>
<td>3</td>
<td>Connecting line</td>
</tr>
<tr>
<td>4</td>
<td>Rubber ring</td>
</tr>
<tr>
<td>5</td>
<td>Translation of the original operating instructions</td>
</tr>
<tr>
<td>6</td>
<td>Warning sticker for window</td>
</tr>
<tr>
<td>7</td>
<td>Lens (status indicator)</td>
</tr>
<tr>
<td>8</td>
<td>Safety sticker</td>
</tr>
<tr>
<td></td>
<td>The supplied sticker must be placed on a visible area on the</td>
</tr>
<tr>
<td></td>
<td>frame of the power-operated window.</td>
</tr>
<tr>
<td>9</td>
<td>SAFETY NOTICE</td>
</tr>
<tr>
<td>10</td>
<td>Power supply (optional accessories)</td>
</tr>
</tbody>
</table>
2. Installation

2.1 Hardware overview timber and PVC (TITAN AF, sash rebate width 850 - 1560 mm)

<table>
<thead>
<tr>
<th>No.</th>
<th>Material description</th>
<th>Piece</th>
<th>Sash rebate width</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Handle Si-line removable</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Rose Si-line</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Countersunk screw M5 x 40</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Top corner AF VSO 2 RS A0055</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Top stay AF size 2</td>
<td>1</td>
<td>850 - 1050</td>
</tr>
<tr>
<td></td>
<td>Top stay AF size 3 1RS</td>
<td>1</td>
<td>1051 - 1250</td>
</tr>
<tr>
<td></td>
<td>Top stay AF size 4 1RS</td>
<td>1</td>
<td>1251 - 1450</td>
</tr>
<tr>
<td></td>
<td>Top stay AF size 4 1RS</td>
<td>1</td>
<td>1451 - 1560</td>
</tr>
<tr>
<td>6</td>
<td>Linkage AF size 1</td>
<td>1</td>
<td>850 - 1450</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>1451 - 1560</td>
</tr>
<tr>
<td>7</td>
<td>Universal countersunk screw 4.5 x 40 (not included in scope of supply)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>DRIVE axxent DK 150 RH</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DRIVE axxent DK 150 LH</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Packer (to be provided by customer)</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** For further information concerning components and the installation of the window hardware, please refer to our product catalogues for the TITAN AF system (document no. H4006.2943 for timber or H4006.2945 for PVC).
2.2 Hardware overview aluminium (LM 4200-DK, sash rebate width 835 - 1600 mm)

Calculation dimensions for operating rods

<table>
<thead>
<tr>
<th>Operating rods</th>
<th>Dimensions</th>
<th>Sash width</th>
</tr>
</thead>
<tbody>
<tr>
<td>S3</td>
<td>S3 = FB - 338 (LM 4200 top stay size 20)</td>
<td>&lt; 1200</td>
</tr>
<tr>
<td>S3</td>
<td>S3 = FB - 506 (LM 4200 top stay size 35)</td>
<td>&lt; 1200</td>
</tr>
<tr>
<td>S3a</td>
<td>S3 = FB/2 - 108</td>
<td>&gt; 1201</td>
</tr>
<tr>
<td>S3b</td>
<td>S3 = FB/2 - 418</td>
<td>&gt; 1201</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Material description</th>
<th>Piece</th>
<th>Sash rebate width</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Handle Si-line removable</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Rose Si-line</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>VS LM-DK KPS (vertical tilt point)</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Gear set FBS M6 Trial/RR</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>LM accessories set DRIVE axxent DK</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>LM 4200 top stay size 20</td>
<td>1</td>
<td>835 - 980</td>
</tr>
<tr>
<td></td>
<td>LM 4200 top stay size 35</td>
<td>1</td>
<td>981 - 1600</td>
</tr>
<tr>
<td>7</td>
<td>DRIVE axxent DK 120 RH  (for LM 4200 top stay size 20)</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>DRIVE axxent DK 120 LH  (for LM 4200 top stay size 20)</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>DRIVE axxent DK 150 RH  (for LM 4200 top stay size 35)</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>DRIVE axxent DK 150 LH  (for LM 4200 top stay size 35)</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Stay striker MV</td>
<td>1</td>
<td>1201 - 1600</td>
</tr>
</tbody>
</table>

Note: For further information concerning components and the installation of the window hardware, please refer to our planning manual for ALU systems (document no.: H4006.3042, drawing no.: LMen1362 and LMen1361).
2.3 Profile machining

Milling and drilling the timber frame profile (lock side on top)

**Important:** Apply protective varnish after milling the routed pocket.

### 1 Machining centre

### 2 Manual production

<table>
<thead>
<tr>
<th>Groove axis</th>
<th>Dimension a</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>15.5</td>
</tr>
</tbody>
</table>

1. Dimensional reference plane for machining centre

2. Dimensional reference plane for manual production

Drilled hole ø 6.5\(^{(1)}\)

Position of locking cam in locking position

---

\(^{(1)}\) The status indicator and infrared remote control require a drilled hole of ø 6.5
Milling and drilling the PVC frame profile

Important: Unlatch the reinforcement before assembling the profiles.

1 Machining centre
2 Manual production

<table>
<thead>
<tr>
<th>Groove axis</th>
<th>Dimension a</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>15.5</td>
</tr>
</tbody>
</table>

1. Dimensional reference plane for machining centre

2. Dimensional reference plane for manual production
   Position of locking cam in locking position

Drilled hole ø 6.5 \(^{(1)}\)

Space required for DRIVE axxent DK

1) The status indicator and infrared remote control require a drilled hole of ø 6.5
Milling and drilling the aluminium frame profile

1 Machining centre
2 Manual production

<table>
<thead>
<tr>
<th>Groove axis</th>
<th>Dimension a</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>12.5</td>
</tr>
</tbody>
</table>

1. Dimensional reference plane for machining centre

2. Dimensional reference plane for manual production

Drilled hole ø 6.5

Position of locking cam in locking position

Space required for DRIVE axxent DK

1) The status indicator and infrared remote control require a drilled hole of ø 6.5
2.4 Installation steps (example)

<table>
<thead>
<tr>
<th>Timber</th>
<th>PVC</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Timber Diagram" /></td>
<td><img src="image2.png" alt="PVC Diagram" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aluminium</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3.png" alt="Aluminium Diagram" /></td>
</tr>
</tbody>
</table>
2.5 Installation and connection (timber, PVC and aluminium)

Attention!
The drive must be seated angularly in the profile and firmly bolted.
2.6 Install and connect window sash DRIVE axxent DK

1. Install the window sash

2. Comfort mushroom cam (if available)
   a. Lift
   b. Underlay rubber ring (scope of delivery)

3. Turn hardware to locking position

4. Check the unlatching

5. Move hardware to turn position
2.7 Release and adjustment

**Release (emergency release)**

1. Push the card between the frame and window sash according to the diagram
2. Push the card forwards (direction of handle)
3. Actuate handle

**Adjustment**

4. Adjust DRIVE axxent DK in direction of locking side or hinge side

If the lever cannot be switched into turn position (horizontal position), adjust DRIVE axxent DK as shown.

If the lever is not in a vertical position during manual operation, adjust DRIVE axxent DK as shown.
2.8 Mechanical functional test

Before making the electric connections, check the mechanical function of the DRIVE axxent DK as described above and adjust, if required.

Attach window sticker and safety sticker to the window sash in a visible location above the rose. Hand over the safety notices to the user.

2.9 Connection of external button

Connect the power supply

 › Wire the circuit according to the circuit diagram

<table>
<thead>
<tr>
<th>Abbreviations</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>br</td>
<td>brown</td>
</tr>
<tr>
<td>bu</td>
<td>blue</td>
</tr>
<tr>
<td>bk</td>
<td>black</td>
</tr>
<tr>
<td>rd</td>
<td>red</td>
</tr>
<tr>
<td>wh</td>
<td>white</td>
</tr>
</tbody>
</table>

*All-pole safety isolation

230 V

br — bu

bk — rd

24 V

Closed — Open

DRIVE axxent DK

24 V DC
3. Commissioning

- The red LED of the DRIVE axxent DK flashes when the supply voltage is switched on.
- A referencing run must now be performed.
- Only perform reference run with the window open.

⚠️ WARNING ⚠️ Risk of injury during referencing run!
The safety functions are disabled!

- Do not operate the DRIVE axxent DK if you do not have a clear view of the window.
- Ensure that other persons stay clear of the window.

3.1 Perform reference run

1. LED flashes red
2. Press "Close" button 1x
3. ... reference run starts

Note: The reference run takes approx. 2 to 30 seconds (depending on the original position of the drive)
4. Operation

4.1 Opening the window

1. Press “Open” button 1x
2. LED lights up green
3. The window opens automatically

4.2 Opening the window for a 10 min. ventilation period

1. Press “Open” button 2x
2. LED lights up green
3. The window opens automatically
4. LED flashes green
5. LED lights up red
6. The window closes automatically

4.3 Closing the window

1. Press “Close” button 1x
2. LED lights up red
3. The window closes automatically
4.4 Remote control

Up to 5 windows with DRIVE axxent DK can be operated with one remote control.

Teach-in remote control

Buttons 1 to 5 can each be assigned to a window with DRIVE axxent DK.

1. Press buttons 1, 2, 3 and 5 within a period of 3 seconds
2. LED lights up green
3. Select window 1 to 5
4. LED goes out after 10 seconds

Deleting windows from remote control

1. Press buttons 1, 2, 3 and 5 within a period of 3 seconds
2. LED lights up green
3. Wait until LED goes out
4. The remote control is now ready for a new teach-in procedure.

Safety functions

• If the maximum permissible force of 150 N is exceeded when closing, e.g. due to wind load, the drive will return to its starting position.
• The drive will attempt to close the window again after 60 seconds, with the LED flashing red/green. If the second attempt fails, the window will remain open with the LED flashing red.
• Check window for obstructions and remove them, if required. Press “Close” button again.
4.5 Manual operation

Ensure that you always observe this operating sequence!

**With the window open**

1. Insert the handle into the rose. The handle must be in a vertical, upward position.
2. Close window manually by pushing it into the closed position.
3. Switch the handle of the window gear to the locking position. The handle must be in a vertical, downward position.
4. Move the window lever into the turning position.

**With the window closed**

1. Insert the handle into the rose, the lever must be in a 45°-position.
2. Switch the handle of the window completely into the locking position. **Attention!** The handle must be in a vertical, downward position. This is necessary because the drive must first be disconnected from the hardware.
3. Move the window lever into the turning position.
4. Turn the handle back into the closed position after closing the window.

- When the window is closed again and locked, the drive must be connected. Press "Close" button. The drive is then reconnected. All functions are then available again.
- If the drive is not reconnected, the drive cannot be operated. When pressing button "Open" for 3 seconds, the drive will open and then return to its starting position.
- Remove handle and close the rose after manual operation.
5. Maintenance

The maintenance and inspection of the DRIVE axxent DK and the hardware components in the window must be performed at least 1 x per year by a qualified professional. The following features must be observed:

- Function of the DRIVE axxent DK
- Airgap
- Condition of packers and restrictor (if existent)
- Firm seating of the attachment screws
- Ease of movement of the hardware

6. Troubleshooting

In case of a malfunction, do not open the device or try to repair it under any circumstances.

If the problem is not listed in the table below, please contact your window specialist or SIEGENIA directly: Tel. +49 271 3931-0

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The window sash is pushed in a horizontal direction for release</td>
<td>Stabilise the window sash by means of a restrictor according to the diagram</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The window sash is pushed in a horizontal direction for locking</td>
<td>Stabilise the window sash by means of a restrictor according to the diagram</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The window sash is elevated for locking</td>
<td>Stabilise the window sash by means of a restrictor according to the diagram</td>
</tr>
<tr>
<td>Problem</td>
<td>Possible cause</td>
</tr>
<tr>
<td>---------</td>
<td>----------------</td>
</tr>
</tbody>
</table>
| DRIVE axxent DK cannot be opened manually | Unlatching does not function | Perform emergency release (see page 16)  
Verify proper seating of the comfort mushroom cam  
Check the airgap  
Check milling dimensions if necessary (timber windows) |
| DRIVE axxent DK shows no reaction when key is pressed | No power supply | Check power supply  
Wiring wrong/defective or cable defective | Check the wiring (see page 17)  
Power supply wrong/defective | Measure the supply voltage  
Target values:  
Input  230 V AC; 50/60 Hz; 170 mA  
Output  24 V DC; 0.75 A; 18 W  
Remote control not taught-in | Teach in remote control (see page 20)  
Remote control battery is empty | Replace battery |
| DRIVE axxent DK does not move »OPEN« / »CLOSE« | No power supply | Check power supply  
Hardware is blocked or too stiff | Check manual function of window and rectify blocking if necessary  
Draught | Increase the pressure  
If necessary, deactivate anti-mishandling device  
Hardware is too easy-running | Increase the pressure  
If necessary, deactivate anti-mishandling device |
| DRIVE axxent DK beeps several times and stands still. LED flashes permanently | Strong wind pressure | Wait until the wind pressure subsides  
Hardware is blocked or too stiff | Check manual function of window and rectify blocking if necessary  
Power failure | Rectify the power failure and perform reference run |
| DRIVE axxent DK beeps several times and slowly attempts up to 3 times into the »Close« position (the drive stands still after the third attempt). LED flashes permanently | Strong wind pressure | Wait until the wind pressure subsides  
Hardware is blocked or too stiff | Check manual function of window and rectify blocking if necessary  
Draught | Rectify reason for the draught  
Power failure | Rectify the power failure and perform reference run |

*Note: A current measurement is carried out on the closed hardware in order to prevent operating errors when the window is open. If you issue an opening command while the window is open, the drive will detect that no hardware is coupled. The drive will reverse and return to the starting position.*
7. Technical specifications

<table>
<thead>
<tr>
<th>DRIVE axxent DK</th>
<th>Performance data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Window material</td>
<td>Timber, PVC or aluminium</td>
</tr>
<tr>
<td>Installation location in window</td>
<td>At top, horizontal</td>
</tr>
<tr>
<td>Sash weight</td>
<td>Max. 130 kg [observe the corresponding application range diagrams]</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>24 V, 0.6 A</td>
</tr>
<tr>
<td>Electronic overload protection</td>
<td></td>
</tr>
<tr>
<td>Power cable supplied</td>
<td>2 pieces: 2 x 0.8 mm, length 2.5 m</td>
</tr>
<tr>
<td>Opening speed</td>
<td>Approx. 10 mm per second</td>
</tr>
<tr>
<td>Duration of opening motion</td>
<td>Approx. 25 seconds</td>
</tr>
<tr>
<td>Closing speed</td>
<td>Max. 5 mm per second</td>
</tr>
<tr>
<td>Opening and closing force on drive rod</td>
<td>Max. 700 N [corresponds to approx. 8 Nm manual lever torque]</td>
</tr>
<tr>
<td>Closing force of tilt window sash (reduced)</td>
<td>Max. 150 N</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP20 for dry locations</td>
</tr>
<tr>
<td>Permissible operating temperature</td>
<td>-20 °C to +40 °C</td>
</tr>
<tr>
<td>Tested with</td>
<td>30,000 operating cycles (double stroke including locking part)</td>
</tr>
</tbody>
</table>

8. Dimensions

![Image of dimensions](image-url)
9. Information concerning product liability

9.1 Intended use

Any use of this product that is not in accordance with its intended use, or any adaptation of or modification to the product and its associated components for which the express consent of SIEGENIA has not been obtained, is strictly prohibited. SIEGENIA accepts no liability whatsoever for any material losses or injury to people caused by failure to comply with this stipulation.

9.2 Product liability

Our products are guaranteed – subject to correct installation and proper use – for a period of one year from the date of receipt by a company (according to our general terms and conditions) or as otherwise agreed, and for a period of two years for end consumers, in accordance with statutory provisions. As part of our ongoing improvements, we reserve the right to replace individual components or entire products. Consequential losses resulting from defects are excluded from the warranty within the limits of the law. The warranty shall become void if modifications that are not authorised by us or have not been described in this documentation are performed on the product and/or individual components, or if the product and/or individual components is/are dismantled or partly dismantled, and the defect is due to the changes made.

9.3 Disclaimer of liability

The product and its components are subject to stringent quality controls. As a result, they function reliably and safely when used correctly.

Our liability for consequential losses and/or claims for damages is excluded, except in the case of wilful misconduct or gross negligence, or where we are responsible for injury to life, physical injury or damage to health. Strict liability under the German Product Liability Act (Produkthaftungsgesetz) remains unaffected. Liability for the culpable violation of significant contractual obligations also remains unaffected; liability in this case is limited to losses that are specific to the contract and that could have been foreseen. The above regulations do not imply a change in the burden of proof to the detriment of the consumer.

9.4 Environmental protection

Although our products do not fall within the scope of the German Electrical and Electronic Equipment Act, SIEGENIA will continue to meet the requirements of this Act and will endeavour to completely eliminate the use of substances that are hazardous to the environment as soon as this becomes technically feasible.

Electrical products should not be disposed of as household waste.

10. Feedback on documentation

We welcome your comments and suggestions on how to improve our documentation.

Please email your comments to documentation@siegenia.com.
11. EC declaration of incorporation

Manufacturer: SIEGENIA-AUBI KG
Hardware and ventilation technology
Duisburger Straße 8
57234 Wilnsdorf

declares that the product: Concealed motion chain drive
Device type

DRIVE axxent DK
Type designation

meets the following fundamental requirements:

EC Machinery Directive 2006/42/EC
EMC Directive 2004/108/EC and 2006/95/EC
RoHS Directive 2011/65/EU
EN 55014-1:2011
EN 55014-2:1997+A1
EN 61000-3-2:2006
EN 61000-3-3:1995+A1,A2
EN 62233:2008
EN 60335-1:2012
EN 60335-2-103:2010

This declaration is based on test reports from:
EMC TestHaus Dr. Schreiber GmbH - Test protocol 14/383

The machine may only be put into operation when incomplete if it has been ascertained, if applicable, that the machine into which it is to be installed conforms to the specifications of the Machinery Directive.
The specific technical documentation has been drafted in accordance with Annex VII Part B of the EC Machinery Directive 2006/42/EC.
We undertake to provide such documentation to market surveillance authorities in electronic format within a reasonable time upon reasoned request. The aforementioned technical documentation can be obtained from the manufacturer.

Siegen, 01.06.2015
S. Bauerdick (Works management)

This declaration certifies conformity with the directives cited but does not warrant properties in the legal sense.
The safety instructions in the product documentation supplied must be followed.
Contact your dealer:
Head Office: 
Industriestraße 1–3 
57234 Wilnsdorf 
GERMANY
Phone: +49 271 3931-0
Telefax: +49 271 3931-333
info@siegenia.com
www.siegenia.com

SIEGENIA worldwide:
Austria Phone: +43 6225 8301
Belarus Phone: +375 17 3143988
Benelux Phone: +31 85 4860180
China Phone: +86 316 5998798
France Phone: +33 3 89631831
Germany Phone: +49 271 39330
Great Britain Phone: +44 2476 622000

Hungary Phone: +36 76 500810
Italy Phone: +39 02 9153601
Poland Phone: +48 77 4477700
Russia Phone: +7 495 7217762
South Korea Phone: +82 31 7985590
Switzerland Phone: +41 31 3441010
Turkey Phone: +90 216 5934151
Ukraine Phone: +380 44 4637979

You can find address details for our international sites at: www.siegenia.com