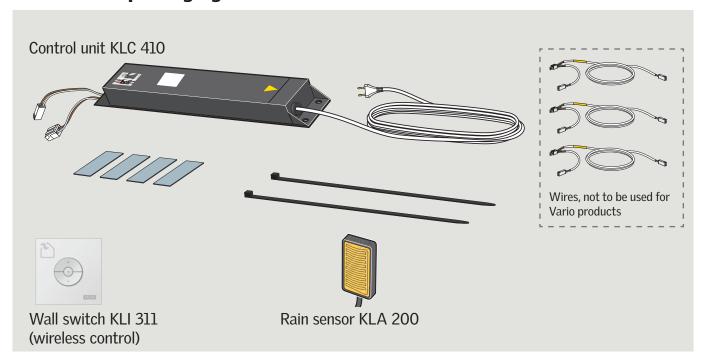


Vario by VELUX opening accessories

Control unit, wall switch, rain sensor and VELUX ACTIVE indoor climate control

Contents of packaging



Add-on



Supplied by others

Bracket for rain sensor

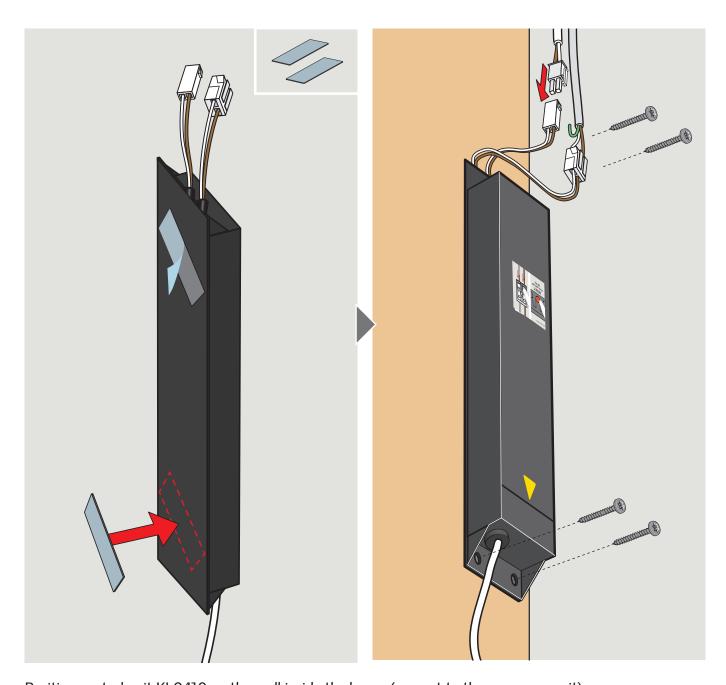


Extending wires for opening accessories

- Rain sensor wire: One 3 x 0.5 mm² UV cable (up to 30 metres)
- Actuator wire: One 2 x 1.5 mm² standard installation cable (up to 20 metres)

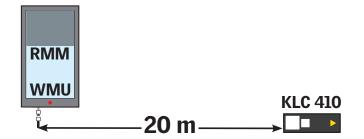




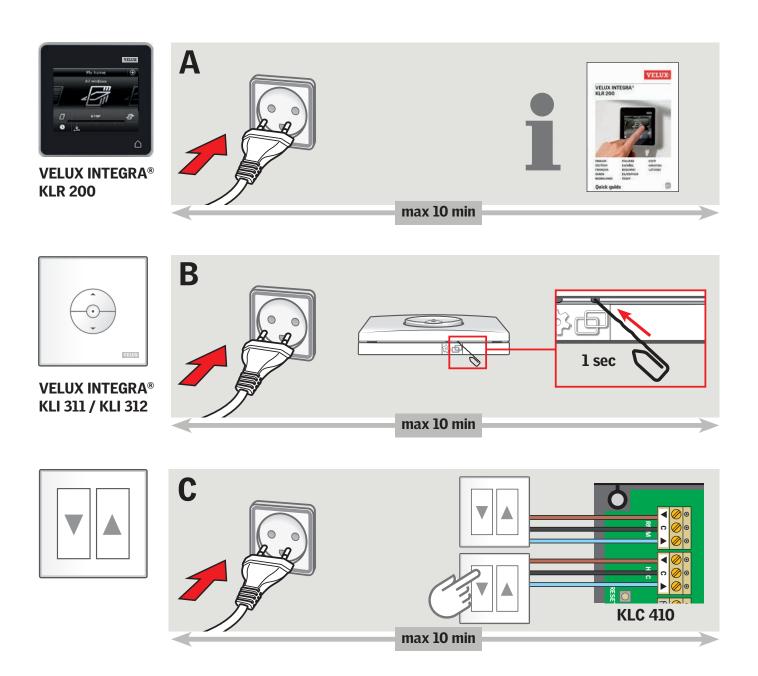


Position control unit KLC410 on the wall inside the house (eg next to the consumer unit).

▲ NOTE: When extending the cable (up to max. 20 m) between control unit KLC 410 and chain actuator WMU/roller blind RMM, the cable dimensions in the table must be observed. You can connect max one motor wire to one control unit KLC 410. Control unit KLC 410 works for both single and dual actuated rooflights.



mm ²	2 x 0.75	2 x 1.50
RMM	2 x RMM	4 x RMM
WMU	0	2 x WMU



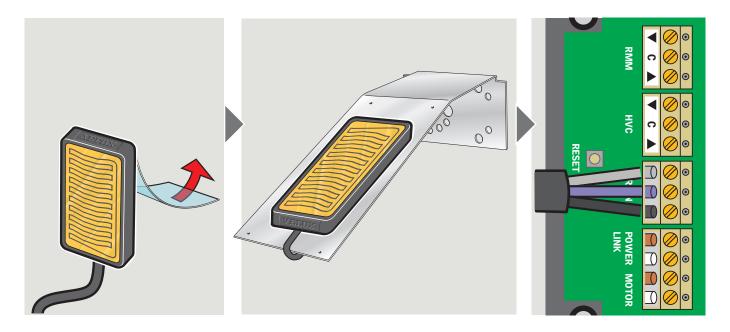
▲ NOTE: Control unit KLC 410 must **not** be connected to mains supply until the installation of the chain actuator and roller blinds is completed and they are ready for registration in the control. Once control unit KLC 410 has been connected to the mains supply, registration of chain actuator/roller blind must take place within 10 min. If the registration of the chain actuator/roller blind does not take place within 10 min, disconnect the power from the control unit and then reconnect it.

- **A** Operation with control **A** (control pad KLR 200): See instructions enclosed with control pad.
- **B** Operation with control **B** (wall switch KLI 311/312): Connect the plug of KLC 410 to a power socket and press the PAIR-button on the wall switch for 1 sec with a pointed object.
- C Operation with control C (potential-free switch): Connect the plug of KLC 410 to a power socket and press the OPEN/UP or DOWN/CLOSE button.

 If both a control and a potential-free switch are to be used for the operation of roller blinds, the roller blind must be registered in control A or B before connecting the potential-free switch.

 If the roller blind is already registered in a control A or B, the roller blind must be prepared for registration in the potential-free switch by means of the control unit. See instructions for control A or B.

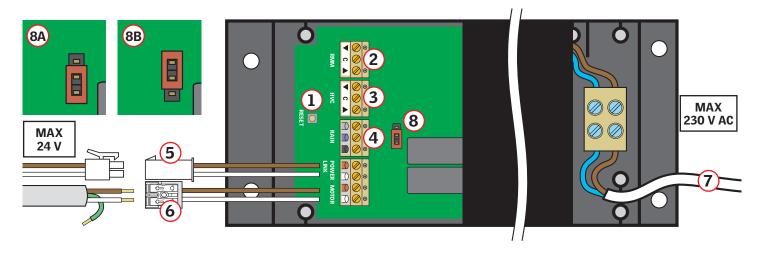
 When the roller blind rolls up and down, it is ready for registration. Press OPEN/UP or CLOSE/DOWN for 1 sec within 10 minutes.



Connect rain sensor KLA 200 to control unit KLC 410.

NOTE: Make sure that the colours match as shown.

The cable for the rain sensor can be extended up to 30 m with a min 0.5 mm² cable.



Control unit (connection plan)

1 RESET-button for registration of control or potential-free switch. After a long press (6-10 sec), registration in control must take place within 10 min.

IMPORTANT! After pairing with the remote control, connect the chain actuator with the top unit using the locking pin. Now, calibrate the control unit by fully opening and closing the window using the remote.

- Potential-free entry for roller blinds
- (3) Potential-free entry for chain actuator
- (4) Entry for rain sensor KLA 200
- (5) Plug connector for roller blinds
- 6 Plug connector for chain actuator
- (7) 230 V AC, consumption max 250 W
- (8) Jumper for compulsory chain actuator detection

Potential-free connection and function

Function of entries

OPEN/UP is controlled by connecting C and A.

CLOSE/DOWN is controlled by connecting C and ▼.

STOP is controlled by connecting C with both \blacktriangle and \blacktriangledown .

Contact requirements

Potential-free contacts with a maximum resistance of 1 k Ω can be used. A current of 1 mA at 12 V DC runs through the contact.

Contacts with a pulse signal can be used if the duration of the pulses is between 100 ms and 60 sec.

A contact with a pulse signal between 100 ms and 1 sec will make the product run to its end position.

A contact with a pulse signal between 1 and 60 sec will run the product until the contact is released.

Note: Do not activate the potential-free entries for more than 120 sec, as this could cause the products to malfunction.

Do not connect voltage to the potential free entries.

Jumper

- Auto detection of chain actuator
- Compulsory detection of chain actuator

⚠ Important information

Read instructions carefully before installation and operation. Keep instructions for future reference and hand them over to any new user.

Safety

- Control unit KLC 410, when connected to Vario by VELUX rooflight, can be used by persons (aged 8 years and above) with sufficient experience and knowledge if they have been given instruction concerning safe use and understand the hazards involved. Cleaning and user maintenance must not be made by unsupervised children.
- Children must not play with the rooflight or the control.
- It is recommended to place the control in the room where the product to be operated has been installed.
- Before operating, ensure that the rooflight is operated without risk of damage to property or injury to people or animals.
- If repair or adjustment work is needed, disconnect mains supply and ensure that it cannot be reconnected unintentionally.
- For personal safety, never have your hand or body out of the rooflight without first having switched off the mains supply to the system.
- The control unit must not be covered (maximum ambient temperature: 40 °C).
- The control unit must not be installed in rooms with a high level of humidity eg in rooms with swimming pools.

Installation

- **Note:** Do **not** connect the control unit to the mains supply until the installation of the chain actuator and roller blinds is completed and they are ready for registration in wall switch KLI 311/312, control pad KLR 200 or in a potential-free switch. See page 3.
- Do not connect the chain actuator to the mains supply during installation to prevent the rooflight from opening or closing suddenly and uncontrollably.
- Maintenance and installation must be carried out in consideration of Health and Safety at Work requirements.

Product

- The control unit has been designed for use with chain actuators WMU 88V 2A or WMU 9093140 3A/6A in combination with Vario by VELUX rooflight and VELUX roller blind RMM.
- The control unit can control one chain actuator WMU 88V 2A or WMU 9093140 3A/6A and up to four roller blinds RMM at a time.
- The control unit is compatible with products with the io-homecontrol® logo.
- The packaging must be disposed of in accordance with national regulations.
- A The product, including batteries if any, is regarded as electrical and electronic equipment and contains hazardous materials, components and substances. The crossed out wheeled bin symbolises that electrical and electronic equipment waste must not be disposed of together with household waste. It must be collected separately at recycling stations or other collection sites or retrieved directly from households to increase the possibilities of recycling, reuse and utilisation of electrical and electronic equipment waste. By sorting electrical and electronic equipment waste with this symbol, you contribute to reducing the volume of incinerated or buried waste and to reducing any negative impact on human health and the environment. Further information can be obtained from the local municipality's technical administration or from your VELUX sales company.
- If batteries can be removed, product and batteries must be disposed of separately.
- In case of snow and/or ice, the operation of the rooflight may be blocked.

Maintenance and service

- Disconnect mains supply before carrying out any maintenance or service work on the rooflight and/or products connected to it and ensure that it cannot be reconnected unintentionally.
- It is recommended to carry out at least one functional test annually to ensure that all moving parts of the rooflight and/or products connected to it are fully functional and not influenced by wear or corrosion.
- If mains cable or any other cable is damaged, it must be replaced by qualified personnel in accordance with national regulations.
- It is recommended that VELUX service engineers carry out any repair work to the VELUX rooflight or VELUX electrical components.
- Spare parts are available through your VELUX sales company. Please provide information from the data label.
- If you have any technical questions, please contact your VELUX sales company, see telephone list or visit www.velux.com.



io-homecontrol® provides advanced and secure radio technology that is easy to install, io-homecontrol® labelled products communicate with each other, improving comfort, security and energy savings.

www.io-homecontrol.com

C € Declaration of Conformity

We herewith declare that Vario by VELUX control unit KLC 410 (BI-SC004-01)

- is in conformity with the Low Voltage Directive 2014/35/EU, the EMC Directive 2014/30/EU, the Radio Equipment Directive 2014/53/EU and the RoHS Directive 2011/65/EU,
- -has been manufactured in accordance with the harmonised standards

EN 60335-1(2012),

EN 62233(2008),

EN 300220-2(2012),

EN 301489-1(2011),

EN 301489-3(2002),

EN 55014-1(2006)+A1(2009)+A2(2011),

EN 55014-2(1997)+A1(2001)+A2(2008) and

EN 55024(2010) and

-has been assessed in accordance with the harmonised standard EN 50581(2012).

When the above-mentioned control unit is connected to a VELUX INTEGRA® chain actuator WMU 88V 2A or WMU 9093140 3A/6A or a VELUX INTEGRA® roller blind RMM installed in a Vario by VELUX rooflight, the total system is to be considered as a machine, which is not to be put into service until it has been installed according to instructions and requirements.

The total system then complies with the essential requirements of the Directives 2006/42/EC, 2014/35/EU, 2014/30/EU and 2014/53/EU of the European Parliament and Council.

VELUX A/S: (Jens Aksel Thomsen, Senior Certification Specialist)

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CE DoC 941986-02



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