Niko Home Control

Your home works better with Niko

PROFESSIONAL

niko
Illuminating ideas.

Contents

Introduction
Your home works better with Niko

Live more comfortably and safer, whilst saving maximum energy. With Niko Home Control, the new electrical installation, you can control the lighting, heating, ventilation, roller blinds, air conditioning and curtains from a central location in your home (or anywhere in the world) and stay in control of your front door. All in a sleek and timeless design.

Time for a new electrical installation

The traditional phone has been ousted by mobile phones and smartphones, whilst iPods and MP3 music players toppled the CD from first place. Due to WhatsApp and other apps, SMS text messaging has declined in popularity We live in a digital age in which technology is evolving ever quicker and we are always connected online.

But meanwhile, what happened to the electrical installation? Very little: the general set-up of electrical networks and the options they offer have largely remained unchanged over the past 30 years. This is very surprising, when you consider the major changes we have witnessed in our way of life and in the way we communicate with the rest of the world. Niko thinks it's time for change and improvement. Niko Home Control is redefining the electrical installation in terms of comfort, ease of use and energy consumption.

Established market presence

As the market leader, Niko is a well-known name in Belgium. In the rest of Europe we have also gained a footing. Innovation is at the heart of everything we do. Especially when it comes to Niko Home Control, which we are continuously updating according to the latest trends.


DASHBOARD

The reasons why installers choose Niko Home Control

Effortlessly easy

The needs of the resident are central for Niko Home Control. By choosing a Niko Home Control installation, you have all the tools needed to meet your clients' needs. An intelligent and flexible electrical installation growing along with the resident and providing every modern day comfort in the home, which is easy to install at the same time.

Discover Niko Home Control II. Similar but better. Quicker and easier to program, more flexible and smarter but with the same components. We completely **redesigned** Niko Home Control:

- a clear, well-organised and intuitive design for the apps, software and touchscreen
- quicker programming: 50% fewer steps
- complex actions are made easy, thanks to the wizard
- personalised profiles for every installation
- software upgrades which can be downloaded and installed by the customers
- flexible programming of actions thanks to simplified conditions
- smart open: integration of external partner systems in no time

You can offer your customers great added value without too much additional work or hassle, whilst boosting your turnover.

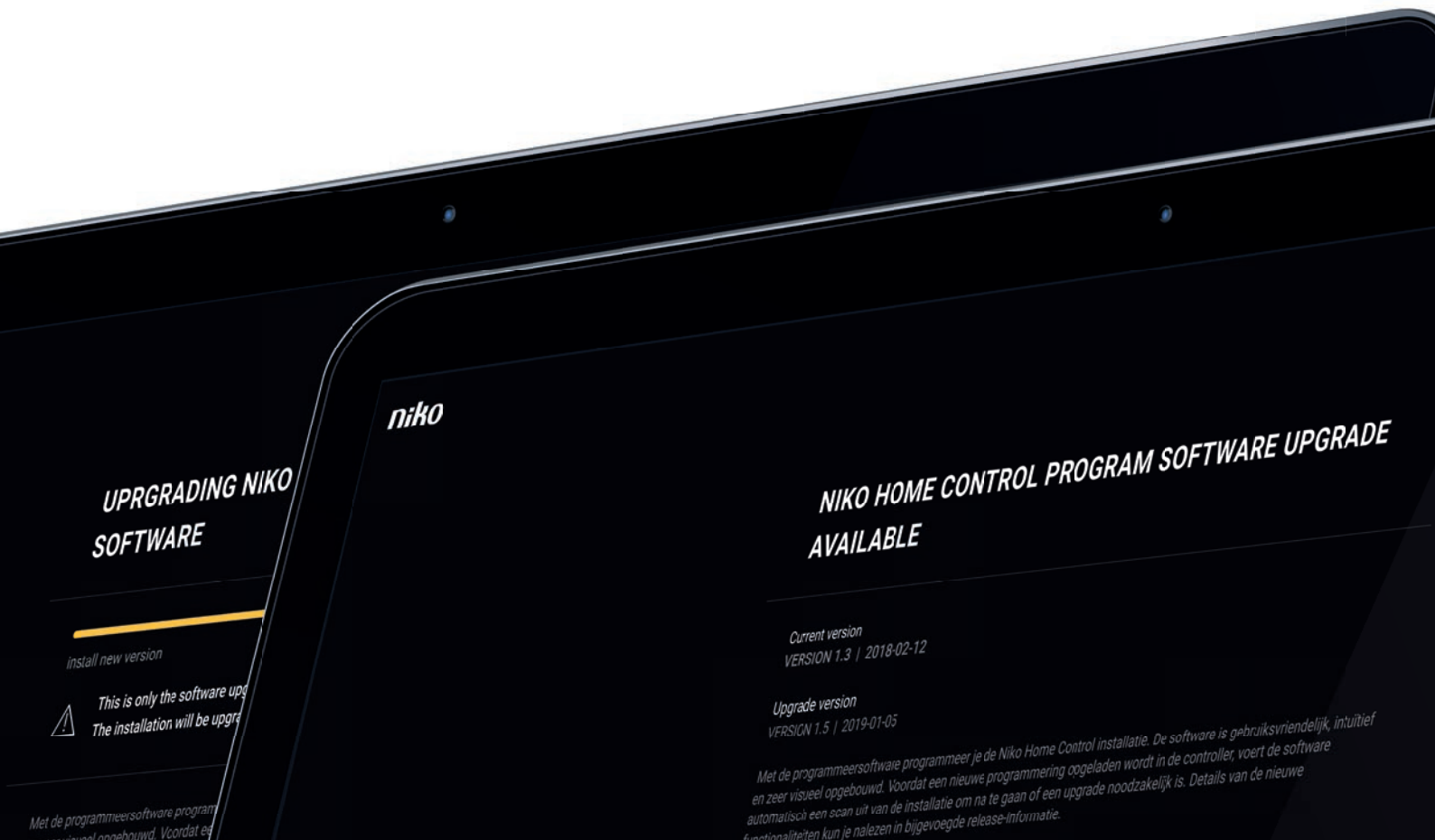
Installed easily and very quickly

- Surface-mounting
  - All basic functions in one central module. The connected controller controls the entire installation and makes it accessible always and everywhere. It delivers power supply to the bus, the modules and the controls. It also connects the installation with the IP devices (such as touchscreen and external video unit) and connects the installation to the internet.
  - The connected controller makes remote control with a smartphone and tablet standard, both indoors and outdoors. All this is done via the internet
  - The built-in router means you no longer need knowledge of IP. Standard 3 IP devices such as the touchscreen and the external video unit are connected. With a switch, this number is easily expanded.
- Error-free programming
  - You can wirelessly connect the laptop with the connected controller and walk through the home while completing the addressing.
  - As the installer, you have access to a diagnostics page analysing the set-up and the functioning of the installation in real time. Now you can easily solve any issues and it reduces the chances of errors.
- Smart control
  - You can control your installation from anywhere in the world with your smartphone.
- Always connected
  - Does Niko Home Control notice something is not right in the home? Your clients will receive alert messages on their smartphone. This way they are always connected with their residence and they have complete control: if necessary, they can respond and act immediately.

- Cabling
  - Empty flush-mounting boxes with bus cabling at all control points. Choose the type and number of controls you wish to have in that location later.
  - Cheaper two-wire non-polarised cabling to all controls.
  - Free topology with standard cables available such as SVV or JYSTY, UTP, STP, TPVF …
  - Less cabling: connect all control points with one another.
  - Touchscreen connection only requires one cable.
  - Possibility to add wireless controls according to the Easywave protocol.
- Cabinet set-up
  - Neatly arranged set-up requires minimal space in the electrical cabinet.
  - Minimal cabling in electrical cabinet as modules are connected via a unique sliding contact.
  - Components with an exceptionally low energy consumption.
  - A minimum of heat dissipation in the electrical cabinet; the modules have a very long life span.

User-friendly programming

- Graphical visualisation of the installation via the programming software.
- Programming back-up stored within the installation.
- Changing or adding functions is done easily and quickly.
- The user can adjust moods or automatic time settings in the programming software.



The Niko Home Control themes

Convince your clients too

Every family is different. And everyone evolves. Therefore Niko Home Control is easily adapted to **the needs of your clients and their family**, no matter how they might evolve. Now and in the future. Niko Home Control begins where most other installations end: with the user.

Your clients wish to live in a comfortable, safe and healthy way? Niko Home Control makes it possible. In a **user-friendly way** they control lighting, roller blinds, sun blinds, … While heating and ventilating more consciously, and saving energy.

Thanks to Niko Home Control they have **complete control over their home** via a touchscreen, their tablet or smartphone, anywhere in the world. Only link those functions and locations to each touchscreen that the user wishes to control from that particular touchscreen. With the user-friendly programming software, your customer can personalise their installation and make changes without any risks.

Basic installation

The basic installation already offers your clients more possibilities than a traditional electrical installation would. With Niko Home Control, the resident chooses simple, intuitive and always modifiable controls via push buttons with clear function symbols. They can set preferences and add or modify moods, names and automatic time settings.

Switched socket outlets, an all-off button to switch off the lighting and switched socket outlets with one push of the button and programmed buttons with a timer switching lights on or off provide the resident with more control. Presence simulation and a panic button promote a feeling of safety. With their smartphone and tablet, they are always in control of their home, anywhere in the world.

More comfort

Niko Home Control can not only be controlled via buttons, your smartphone or tablet, but also with a central touchscreen on the wall. With dimmers, motion detectors and mood control, your clients choose complete ease of use. For each activity they can set the right mood, which can be chosen with one push of the button. Automatically controlled lighting outside, in the toilet, storage areas and the dressing room, provides more comfort and saves energy.

Living safely

If Niko Home Control detects something strange or that a function is being used, clients receive a warning on their smartphone. The roller blinds go up if the smoke detectors detect fire and the lighting is automatically switched on as soon as it gets dark or once motion is detected. Connection to an alarm system switches on the lighting in case of unwanted visitors. A push on the panic button switches all lights on at once. If they're not home, the presence simulation automatically controls the lighting and roller blinds in the morning and evening. And thanks to the video unit at the front door, they can use their touchscreen, tablet or smartphone to see who is at the door. They can always talk to their visitor and even them in, no matter where they are.

Smart heating, smart ventilation

Thanks to zone heating, your clients heat each room at different moments and temperatures. Smart ventilation responds to presence and the lights in the room. Roller blinds, curtains and sun blinds are controlled automatically. Your customers can monitor the energy consumption and the energy production of their solar panels via the touchscreen, their tablet or smartphone or a separate eco-display. Niko Home Control II also automatically controls partner systems: ventilation from Renson, windows from Reynaers, roof windows and roller blinds from Velux.

Example installation with Niko Home Control

Functionalities	Basic installation	More comfort	Living safely	Smart heating, smart ventilation
All-off button	●	●	●	●
Panic button	●	●	●	●
Presence simulation	●	●	●	●
Timer functions (e.g. lighting switches off automatically in storage room)	●	●	●	●
Switched socket outlets (e.g. coffee machine, TV, DVD player …)	● ●	●	●	●
Central control with smartphone/tablet	●	●	●	●
Central control, anywhere in the world	●	●	●	●
Centrally modify system settings		●	●	●
Central control by touchscreen		●	●	
Dimming lights		●		
Create and adjust moods		●		
Dimmed lighting at night (e.g. in the hallway, toilet, bathroom, bedroom …)		●		
Automatically control lighting via indoor and outdoor detectors that detect both movement and light (e.g. toilet, entrance hall, storage room, living room, terrace, at the front door ...).		●	●	
Receive a notification on your smartphone when movement in the house is registered, if presence simulation is activated			●	
Receive notification on your smartphone when all-off function is switched on or off (e.g. when children come home after school or when the cleaner leaves)			●	
Automatic opening of all roller blinds and sun blinds upon smoke detection			●	
Presence simulation with roller blinds (automatically set in desired position each day and hour)			●	●
Connect the alarm system to your electrical installation			●	
See who is at the door and let visitors in from anywhere in the world			●	
All-off button with eco-mode (at front door/in bedroom)				●
Energy-saving mode during the holidays				●
Thanks to zone heating, each room is heated at the right time (bathroom and living spaces)				●
Receive a notification on your smartphone when a room/ zone heats up or cools off too much				●
Ventilation when and where you need it				●
Make maximum use of the sun with the automated roller blinds and sun blind control (measured on thermostat)				●
Know your electricity consumption and consume less				●
Know your water consumption				●
Know your gas consumption				●

Recommended configurations

For each of these themes, we offer recommended configurations for an apartment, regular residence and large residence. For further details, consult the fold-out at the end of the brochure.

Easy installation

The connected controller

The nerve centre of Niko Home Control

The connected controller controls the **logics of Niko Home Control** and supplies the **power** to the bus, modules and controls. It connects the installation with the **IP devices** (such as touchscreen, smartphone and external video unit) and connects them to the internet. After registration, control via smartphone and tablet is enabled and you can enjoy the Niko services for **upgrade, personalisation or diagnosis** of the installation.

Programming is done via the **programming software** on the computer or laptop and is then saved to the controller. The controller records all installation data, which can be read at any time using a computer or laptop. The programming software also allows the programming of time-controlled functions and function preconditions. In the programming software, the **diagnostics page** can also be requested. This page gives you all kinds of useful information about the installation (server connection, bus communication, error messages, status of the bus modules and controls) and can help you to find the cause of a possible issue.

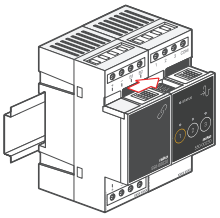
Structured set-up of the electrical cabinet

The electrical cabinet is set up from left to right and starts at the bottom left with the **connected controller**. All additional modules are mounted onto the DIN rail to the right of the controller and are interlinked **via a unique sliding contact**. By using this system, less cabling will be required. This reduces the installer's workload and offers a clearer overview of the set-up.
As soon as a row is complete or the maximum number of 12 rail modules has been reached, you use the next row. A **rail coupler**, or an extra power supply if needed, should be used first at the left **beginning of every new DIN rail**. In order for the subsequent rows of DIN rail modules to communicate with one another, simply interconnect the four wires of the bus and power supply from the previous row to the connection terminals.

What if the installation includes several electrical cabinets?

- If the distance between the electrical cabinets is **less than 20 metres**, they are treated as one single cabinet. There is no need for an additional power supply. Simply interconnect the four wires of the bus and power supply.
- If the distance between the electrical cabinets **exceeds 20 metres**, you use a new power supply for the second cabinet. In this case, only the bus should be interconnected.

Cabling



The cabling in the cabinet is very limited. All modules on one rail are connected together via a sliding contact. This provides them with power supply and bus communication. Simply interconnect the various rows via the rail coupler to the four wires of the bus and power supply.

A **two-wire bus cable** provides power to the various control elements outside the electrical cabinet. The wiring diagram has a **free topology**, which means you are not bound by a fixed cabling diagram. All controls are easily and quickly connected thanks to **the non-polarised cabling**. Simply connect the two wires in the terminals with no risk of a faulty connection.

The distance between the connected controller and the furthest point in the installation depends on the **cable thickness**:

- diameter: 0.8 mm (section: 0.50 mm^2), e.g. SVV, JYSTY ▸ 250 m
- diameter: 0.6 mm (section: 0.25 mm^2), e.g. TPVF ▸ 150 m
- diameter: 0.5 mm (section: 0.20 mm^2), at least AWG24, e.g. UTP, FTP, STP ▸ 100 m

Wall-mounted printed circuit boards

Niko's concept of wall-mounted printed circuit boards is truly unique. The wall-mounted printed circuit boards allow you to easily integrate controls into the installation. Only **one flush-mounting box** is required at each control location. You only have to decide between single or multiple printed circuit boards during the last stage of the project. This allows the resident to delay the decision about the number of controls required at each location until the last stage as well. As needs change, the installation can be adjusted to continue to suit the resident's needs. This is done by simply selecting a different wall-mounted printed circuit board and flush surround plate.

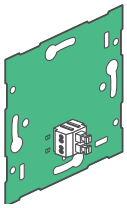
Only need one wall-mounted printed circuit board?

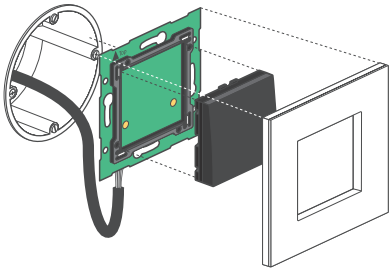
Choose between the traditional **wall-mounted printed circuit board with connector and the wall-mounted printed circuit board with bridge**. The wall-mounted printed circuit board with bridge is ideal for use on very uneven walls or in situations where you need to combine control functions with functions other than those of Niko Home Control.

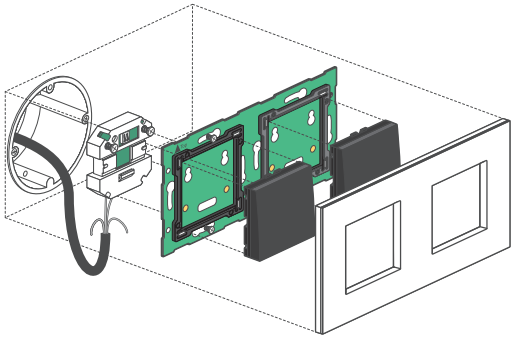
Prefer multiple wall-mounted printed circuit boards?

Even in this case, **one flush-mounting box** will suffice. Decide whether you prefer to work towards the top, bottom, left or right from the flush-mounting box. Need more push buttons? The wall-mounted printed circuit board concept allows you to add controls without the need for additional drilling or channelling work. You connect the installation cables onto the multiple wall-mounted printed circuit board via a connection unit. You mount this **connection unit** anywhere on the wall-mounted printed circuit board.

You mount the printed circuit boards onto the wall using screws or claws. A set of claws is to be ordered separately.







Controls

Depending on the resident's preference, Niko Home Control can be operated using push buttons (with or without display), a touchscreen, a smartphone and/or a tablet (both in and outside the home).

Push buttons

All controls in the Niko Home Control installation follow the design of switch series Niko Pure, Niko Intense or Niko Original. The push buttons are also available with LED to indicate the status of that particular control function. Almost all controls can be mounted onto a flush-mounting box using a wall-mounted printed circuit board. Only the intelligent push buttons with colour display and the indoor motion detector must always be mounted on a flush-mounting box instead of a wall-mounted printed circuit board.

Recommended installation height:

- regular controls: mounting on wall-mounted printed circuit board, 90 to 110 cm above floor level.
- intelligent controls with display: mounting in flush-mounting box, 120 to 150 cm above floor level.

Want to replace a double push button by a six-fold? Need an additional control unit or a new design? All this can be achieved without any problems, because of the assembly system based on wall-mounted printed circuit boards. Niko Home Control supplies power to these types of control units via the two-wire connection. No additional module is required in the electrical cabinet.

You can choose from:

- **control for lighting**
  single, double, 4-fold or 6-fold

- **dimming control**
  single or double

- **push buttons for motor control**
  (e.g. roller blinds, curtains or sun blinds), single or double

- **ventilation control**

- **intelligent push buttons with back-lit colour display:**
  - **mood control:** The resident creates different mood settings for different occasions. Includes the option of automatic sensor-controlled mood settings.
  - **thermostat:** The thermostat can be mounted in any room fitted with a radiator, floor-heating system, heating unit or cooling unit. You can select zone heating or cooling for up to 12 different zones.
  - **eco-display:** Depending on the installed measuring module (electricity meter or pulse counter), the resident will be able to monitor his electricity consumption and/or gas and water consumption. He presses the eco-button to switch off all lights and connected circuits upon leaving the home. The presence simulation can also be activated with a simple push of a button.

- **wireless controls** according to the Easywave protocol

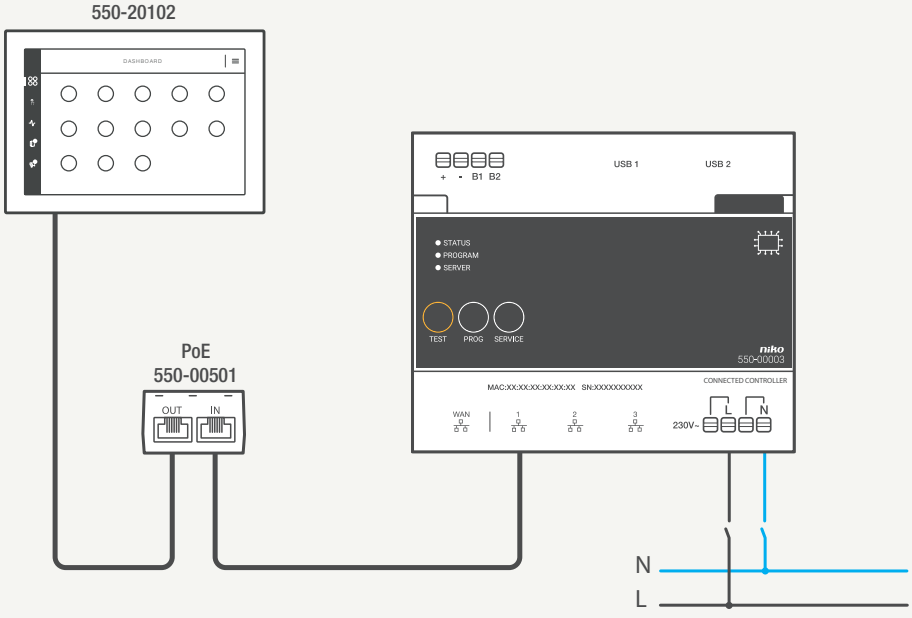
Touchscreen

The Niko Home Control installation is **easily operated** by the resident via the touchscreen*. Using the **user-friendly interface** the resident controls all functions within the home **in one central location**. Switching lights on and off, dimming them, controlling roller blinds ... The resident decides which functions he wishes to control per touchscreen.

The touchscreen also displays details about electricity, gas and water consumption at any time. In addition, the touchscreen serves as an internal video unit in combination with the Niko Home Control external video unit.

To connect the touchscreen, an additional cabinet module is not necessary. The connected controller takes care of everything. In addition, it has an integrated router so you can connect three IP devices without an extra Ethernet switch. Similar to the controls, you simply mount the screen onto **one flush-mounting box**. You connect the touchscreen via one twisted pair cable (UTP, FTP or STP) to the Power over Ethernet power supply (PoE). Alternatively, you can also place a separate 24Vdc power supply in the cabinet. In that case, you need both a power supply cable (SVV, JYSTY, TPVF, UTP …) and a UTP/STP cable for data communication. If you opt for a connection with one UTP/STP cable only, you will need less cabling and the installation process will be easier. It is recommended to mount touchscreen at eye level and at least 150 cm above floor level. This way, the screen can easily be viewed by all residents.

example wiring diagram: touchscreen

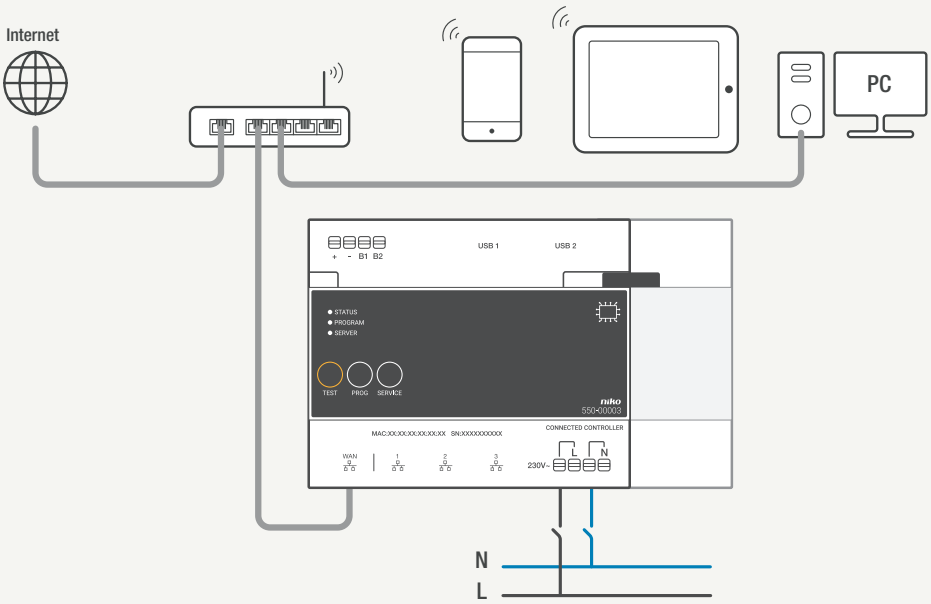


The app

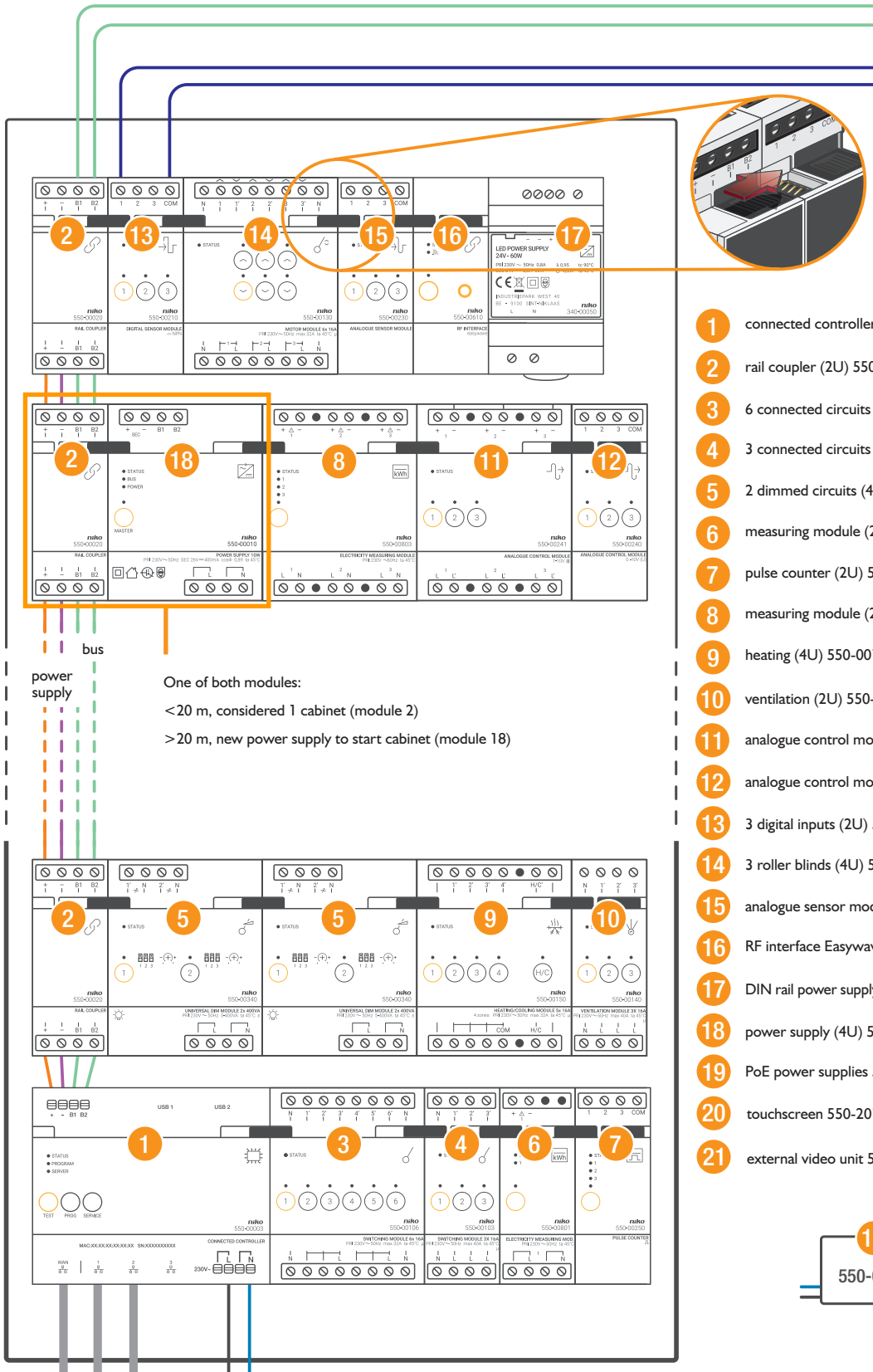
Operating the system using mobile devices, offers the same functionalities and is just as easy to use as the Niko Home Control touchscreen. The Niko Home Control app is available for smartphones and tablets with iOS (iPhone and iPad) or Android operating system.

The connected controller provides all basic functions to remotely control the installation both inside and outside of the home. The resident must register on **https://mynikohomecontrol.niko.eu** to be able to control his installation via smartphone or tablet.

example wiring diagram: smartphone and tablet

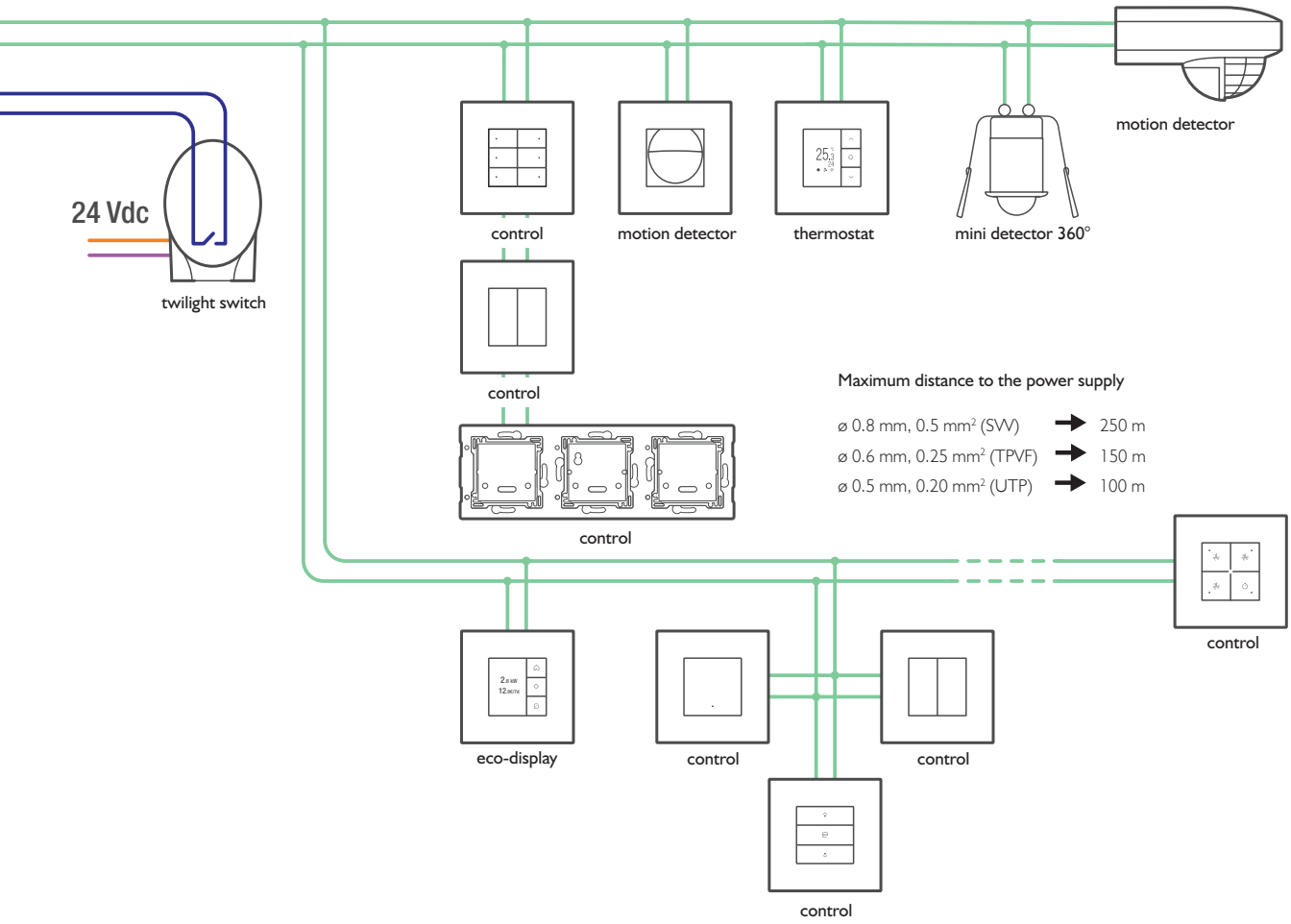


Schematic presentation of the installation



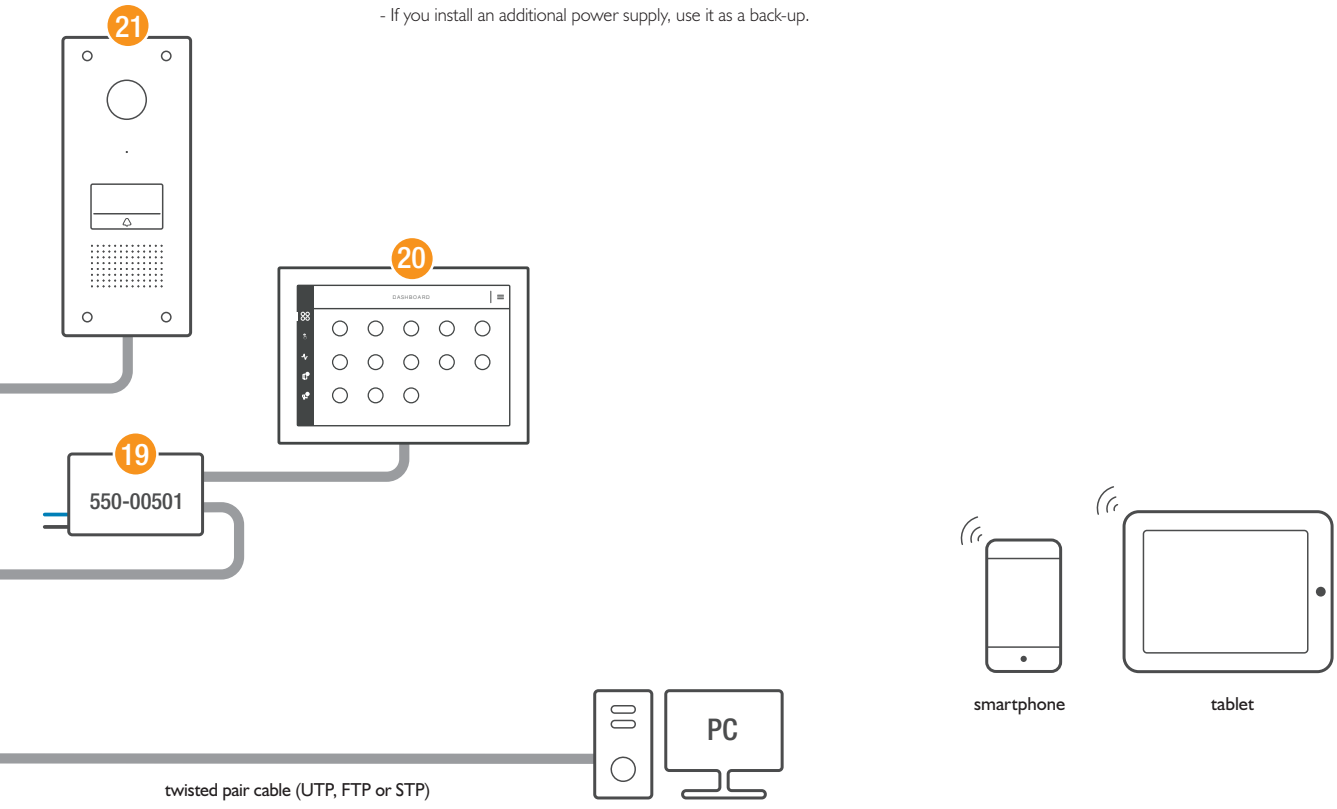
1. connected controller (6U) 550-00003
2. rail coupler (2U) 550-00020
3. 6 connected circuits (4U) 550-00106
4. 3 connected circuits (2U) 550-00103
5. 2 dimmed circuits (4U) 550-00340
6. measuring module (2U) 550-00801
7. pulse counter (2U) 550-00250
8. measuring module (2U) 550-00803
9. heating (4U) 550-00150
10. ventilation (2U) 550-00140
11. analogue control module 1-10V (4U) 550-00241
12. analogue control module 0-10V (2U) 550-00240
13. 3 digital inputs (2U) 550-00210
14. 3 roller blinds (4U) 550-00130
15. analogue sensor module (2U) 550-00230
16. RF interface Easywave (2U) 550-00610
17. DIN rail power supply 24Vdc, 25W 340-00021
18. power supply (4U) 550-00010
19. PoE power supplies 550-00501
20. touchscreen 550-20102
21. external video unit 550-22001

Two-wire, non-polarised - Free topology



installation dimensioning:

- per power supply (maximum 3, including the power supply in the connected controller):
  - a maximum of 24 modular products of Niko Home Control in the cabinet
  - a maximum of 70 controls, of which 20 with indication LED/ motion detector/ thermostat/ eco-display/ mood control
- If you install an additional power supply, use it as a back-up.



The possibilities of Niko Home Control

Monitoring energy consumption

Saving energy in the home is becoming more important than ever before, though it may not always be easy to achieve. Especially as energy is something we cannot 'see'. Many people have no notion of the amount of energy daily consumed in their home. They are only faced with the facts once a year: when the annual energy bill arrives.

Easy to install

- **Very accurate meter readings** give a clear insight into the energy consumption and the amount of energy generated by solar panels. This ensures that energy is used more sensibly and that residents can reduce their energy consumption by 5 to 15%. Monitoring energy consumption also helps to detect faults in the installation. A sudden increase in consumption may indicate that a device is faulty or requires service. Fault detection also increases the security of the home.
- **Simple** and **ultrareliable** gas and water readings with **pulse counts**.
- **Automatic programming** of basic functions via the programming software.
- **Simple and modular** installation of measuring modules:
  - The 1-channel module logs the total consumption of a single-phase supply network (up to 63A).
  - 3-channel module logs the total consumption of a three-phase supply network 3N 400 Vac or partial consumption (solar panels, specific circuits or a combination of circuits).

Easy control

- The **touchscreen** and the app for **smartphone/tablet** display the current and past electricity consumption.
- The app is available for **smartphones and tablets** with iOS (iPhone and iPad) or Android operating system.

Saving energy

- The **eco-display** shows:
  - the current and total energy consumption over the past 7 days, expressed in cost price as well as in absolute numbers (standard).
  - stand-by power consumption: how much energy is consumed by appliances in stand-by mode (standard).
  - amount of energy generated by solar panels as well as gas and water consumption (optional).
- By simply pressing the **eco-button**, the resident automatically switches off all lights and socket outlets or turns down the ventilation and heating. Immediately you will see the **consumption decrease**.
- Thanks to the possibility of monitoring the **energy consumption outside of the home** via the remote control*, the resident can easily monitor whether electricity, water or gas is used unnecessarily.

Measuring electricity consumption and production

Niko Home Control **measures both the electrical current and voltage**. This is the only way to accurately assess how much energy is consumed in the home. The measuring module is therefore fitted with a current clamp to register the current, and with connection terminals to measure voltage:

- Attach the accompanying current clamp by clipping it around the conductor of the circuit to be measured.
- Use the connection terminals to establish a connection with the circuit to be measured.

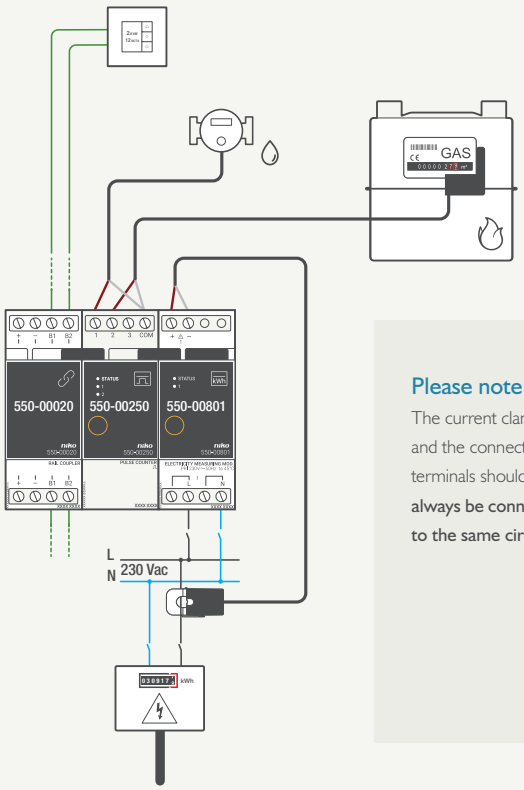
It is also possible to measure the consumption **on specific circuits**. Install the required number of measuring modules as soon as you know which circuits need measuring. A maximum of 20 circuits can be measured.

Required for measuring total consumption and production	Electricity measuring module with one channel (550-00801)	Electricity measuring module with three channels (550-00803)
single-phase connection	1	-
single-phase connection and solar panels*	minimum of 2	1
three-phase connection (3N 400 Vac)	-	1
three-phase connection (3N 400 Vac) with single-phase solar panels	1	1
single-phase connection with three-phase solar panels	-	2

Measuring gas and water consumption

- Include a meter with **pulse output**.
- Connect the pulse output to the pulse counter (a maximum of three meters per pulse counter).
- Enter the scale factor and the unit of measurement of the pulses into the programming software (e.g. 1 pulse = 10 litres).

Example wiring diagram: single-phase connection and pulse counter connected to gas and water meter



Please note

The current clamp and the connection terminals should **always be connected to the same circuit**.

Please note

Only the data recorded by the meter of the energy supplier is valid for billing purposes. In the event of variances between the data registered by the measuring module and the data registered by the meter, **only the data registered by the energy supplier shall be considered valid**.

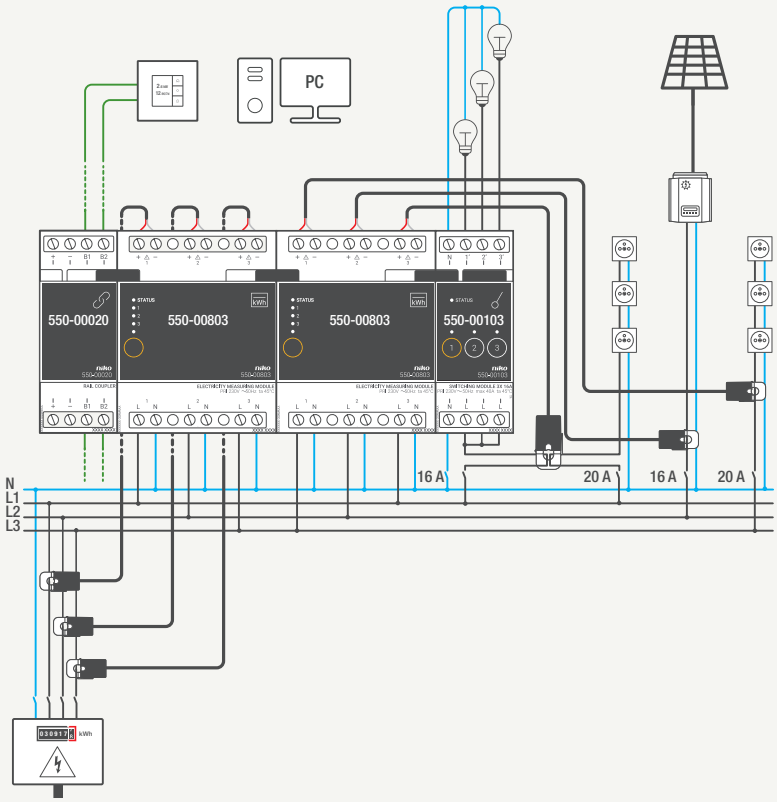
How to include a meter with pulse output?

For a **new build**, request a meter with pulse output from the water and gas company. Also contact your client to include this. **Has a gas meter already been installed**? Then place an adaptor on the housing of the mechanical meter. There is no need to make changes to the actual gas pipes. You can ask the installer of the heating or sanitary system to install a separate gas or water meter with pulse output.

Display of measured data

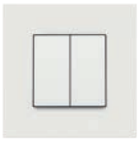
The **eco-display** saves all the measuring data from the previous seven days. Older data is systematically stored in the memory of the connected controller. Every 15 minutes, it will log the energy used for each channel. At any time, you will be able to read the current energy consumption statistics, as this information is updated every three seconds.

Sample wiring diagram: three-phase connection with solar panels, 1 circuit to be measured separately and 1 group of circuits



Lighting control

Every home deserves to be nicely lit. Therefore the resident should be able to **control** the lighting **comfortably**, without having to try all the switches first. Lighting developments have also brought new changes. A variety **of new light sources** have been introduced into the home. This has created a whole new range of possibilities in the field of **mood, colour and accent lighting** for the home. New light sources such as these use much less energy than traditional bulbs. Niko Home Control operates the various light sources in a user-friendly way and adjusts dimmable lighting.



Easy to install

- **Modular installation:**
  - Dimensioning: three- or six-fold switching module.
  - Two circuits dimmable per dimming module.
- **A simple, quick and orderly installation process:**
  - Dimmer and dimming control in one module
  - By using a sliding contact, you do not need to interconnect the bus via cables.
  - If the cabinet is not provided with a terminal strop, connect the neutral conductor to the modules via clamps.
  - ultra-compact modules require minimal space in the electrical cabinet.
  - On the six-fold switching module, the contact points are interconnected in groups of three on the supply side of the fuse.
  - Long life span as a result of the innovating and patented technology used in the dimming and switching module.

Easy control

- **Indication LEDs** ensure that the resident easily finds the control unit in the dark, and indicate whether any of the lights have been left on.
- **User-friendly control:**
  - push buttons
  - mood control with display
  - automatic control via the motion detector
  - central control via touchscreen
  - smartphone and tablet, also when you are not at home
  - automatic control via analogue or digital detectors.
- The resident dims any light with the push of a button or by using a **light-specific dimming control unit** with personal settings.
- **Compact controls** (up to six-fold) require minimal space on the wall.
- **Wireless controls according** to the Easywave protocol when drilling or channelling work is not possible or desired.
- With the **programming software**, the resident can easily add or adjust moods or automatic time settings.

Saving energy

- The resident can also **control socket outlets**: comfortable, extra safe (especially with children around) and reduced energy consumption.
- **Effortless connection and dimming** of halogen lamps, incandescent lamps, energy-saving LED and energy-saving lamps.
- **Ultralow energy consumption** due to the bistable relays in the switching modules.
- Already left home, but not sure if all the lights are switched off? **On the road** the resident can still check whether the lighting is switched off.

Lighting control via detectors

Does your client wish to avoid having to constantly turn the light on and off? Or reduce the electricity consumption of his lighting? Detectors are the perfect solution. The mounting of the mini detector into the ceiling is as good as invisible. It is used as a presence or absence detector and as a photo cell. As presence detector, the lighting automatically switches on and off. As an absence detector, the lighting is switched on using a push button and it is switched off once the detector no longer detects movement. Thanks to the built-in photo cell, the mini detector also takes the amount of daylight into account. You can choose whether it responds only to daylight, movement or both.

Switching light circuits and socket outlets

Every contact in the switching module switches a maximum of 16A if it is a purely ohmic load. Check the table below to find out the **maximum load for each type of lighting**.

Type of lighting	Maximum rms current
incandescent lamps, 230V halogen lamps (ohmic load)	16 A
low-voltage halogen lamps with ferromagnetic or electronic transformer	10 A
fluorescent lamps, non-compensated or serial-compensated	10 A
fluorescent lamps, parallel compensated	6 A
energy-saving lamps (CFLi), LED lamps and HF fluo (lamps with electronic control gear – ECG)	3 A

Important points:

- Total load on a module should not exceed 32 A.
- Do not connect different phases to the same module.
- Provide a 16A fuse for the outlet circuit when switching socket outlets.

Dimming lights

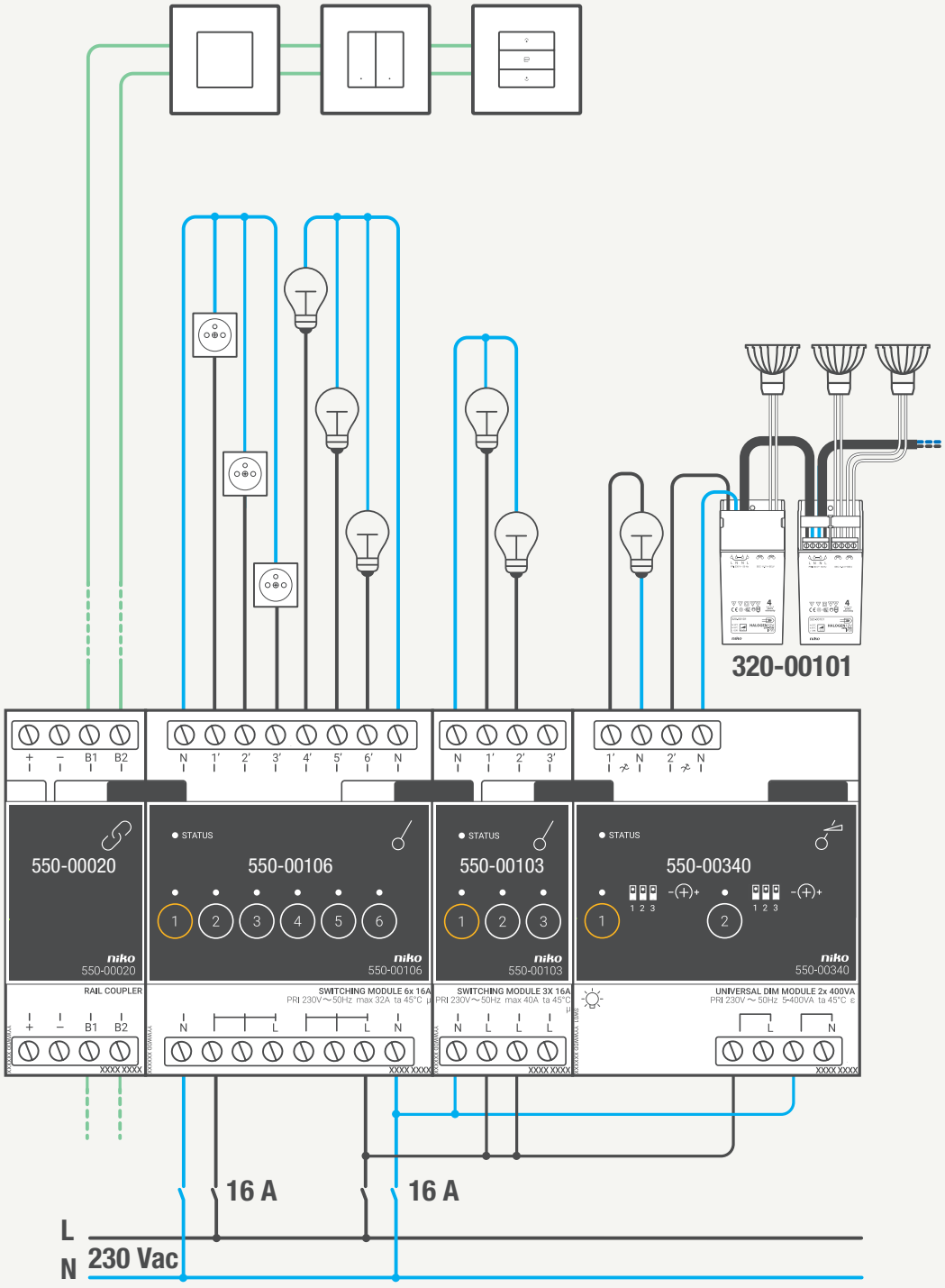
The universal dimming module is a DIN module with two channels for dimming lights from 10 to 400VA (at 45°C) or 500VA (at 35°C) per channel. You set the minimum level and the type of lighting using the DIP switches and potentiometer on the front of the module.

The resident dims the following light sources using the dimming module:

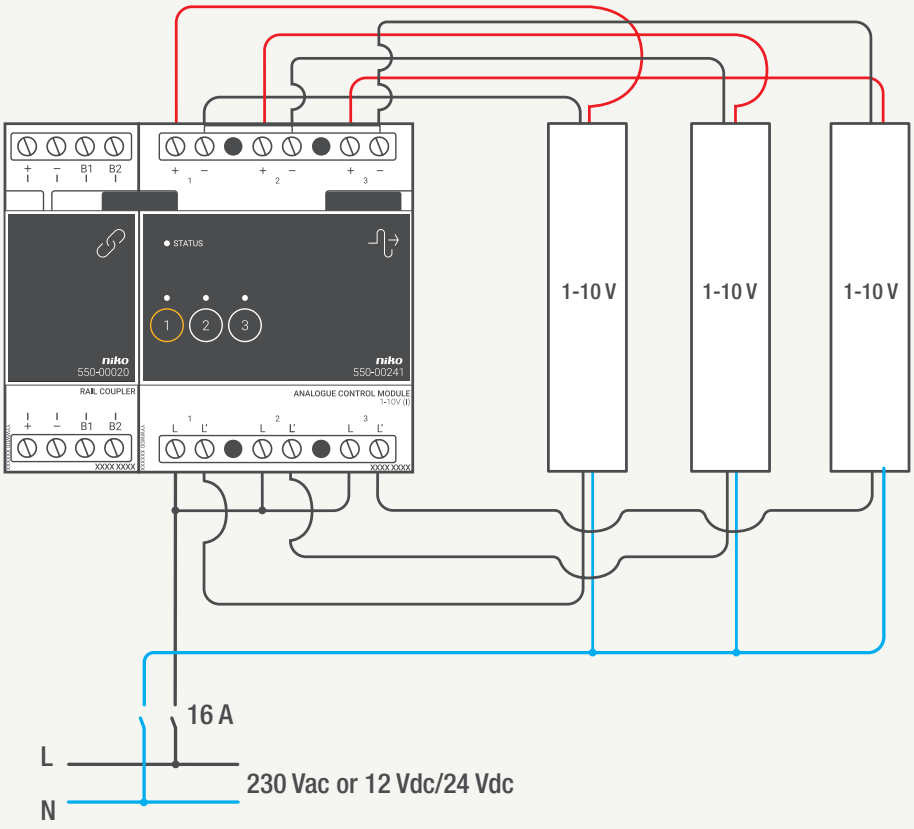
- incandescent lamps
- 230V halogen lamps
- 12V halogen lamps with ferromagnetic transformer
- 12V halogen lamps with electronic transformer
- dimmable LEDs or LED fittings
- dimmable energy-saving lamps (CFLi)

With the analogue control module 0-10 V and 1-10 V, the resident controls high power dimmers and electronic control gear to dim fluorescent lamps and LED strips.

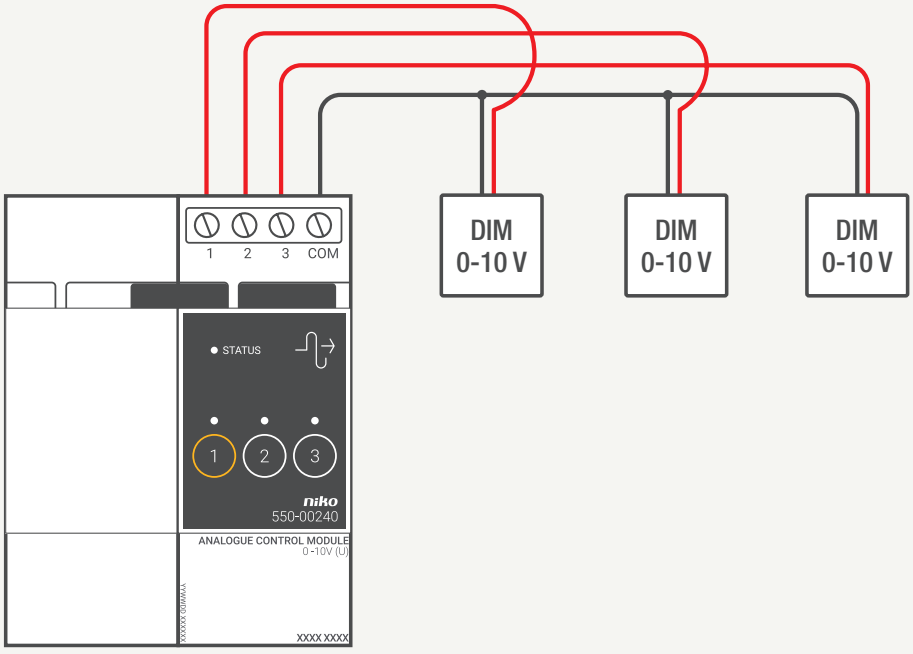
Example wiring diagram: 5 connected light circuits
3 switched socket outlets and 2 dimmed light circuits



Example wiring diagram: 3 dimmers (1-10 V)



Example wiring diagram: 3 dimmers (0-10 V)

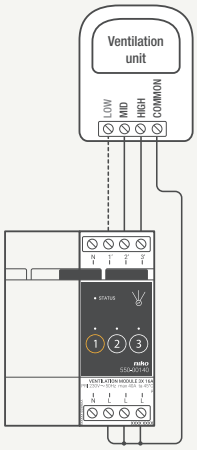


HVAC control

Ventilation control

A ventilation system will help maintain a healthy climate within the home and reduce the loss of energy compared to traditional windows that open. Unfortunately, even ventilation systems create energy loss. By extracting hot air, part of the heating capacity is lost. In new homes, this translates into a heat loss of 20 to 25%. Heat loss during ventilation and electricity consumption are some of the main reasons why you should opt for smart ventilation control. This way, the home will only be ventilated when required, without wasting energy.

Example wiring diagram: ventilation control



Easy to install

- Ventilation control is easily integrated into the installation:
  - Same connection as the traditional three-way switch.
  - Only one module required for the operation of several types of ventilation (two- or three-wired).
  - Suitable for ventilation type C (mechanical extract ventilation) and D (mechanical supply and extract with heat recovery).
  - Ventilation control via NO contacts without complex integration.
  - Control logic located inside the module and software.

Easy control

- Living more comfortably:
  - Is the bathroom in use or are the lights above the kitchen counter switched on? Then the ventilation system will automatically and temporarily switch to a higher setting.
  - The resident enters his personal preferences in the user-friendly ventilation control unit. A LED indicates to which level the ventilation is set, so the resident can always 'see' at which setting the ventilation system is operating.
  - Using remote control, the resident can control the ventilation setting from outside of the home. He can attune the ventilation, the sun blinds, and the air conditioning to each another.

Ventilation setting	Three-wire	Two-wire
low	contact 1	*
normal	contact 2	contact 2
high	contact 3	contact 3

Saving energy

Niko Home Control and the ventilation control system help the resident save energy. The ventilation function automatically switches to the lowest setting when the resident leaves his home. Upon his arrival back home, the ventilation function automatically returns to its previous setting. This reduces the loss of hot air, whilst at the same time, less energy is being used by the ventilation motor and a healthy indoor climate is created.

Niko Home Control includes a **ventilation module in the electrical cabinet** that takes over the function of the three-way switch (in a traditional installation) and controls the ventilation system (type C or D).

The ventilation unit is operated via a **two-wire or three-wire control**. Check the manual of the ventilation unit for the correct operating instructions.

- With a **two-wire** control, you connect the common terminal (from the ventilation unit) in between two control wires. If no control wire is selected, the ventilation system will function at the lowest setting.
- With a **three-wire control**, you connect the common terminal (from the ventilation unit) in between three control wires. Each control wire represents a certain setting.

Heating control

The living room is used at different hours than the kitchen or bathroom. Children use their bedroom as a place to play or study after school. Not all rooms within the home need heating at the same time. Niko Home Control offers a comfortable and energy-efficient solution.

Easy to install

- Heating control is easily integrated into the installation:
  - Zone control and heating system control via NO contacts **without complex integration**
  - Control logic located inside the module and software
  - Energy-saving logic can easily be added via the programming software
- You can apply the same logic to the **cooling system.** The thermostats can be set both to the cooling or heating function.
- **Modular installation:**
  - One module controls four zones
  - Extra modules can easily be added

Easy control

- Easy **zone-based** adjustments.
- Selection between various programmes with personal settings in line with the resident's needs.
- User-friendly **thermostat**.
- Automatic heating control: no need for the resident to go around the house to turn thermostatic taps.
- **Improved daily comfort** due to remote control*: with one click on his smartphone or tablet, the resident can set the heating one degree higher before leaving work. He will never come home to a cold house again.

Saving energy

- The heating control function of Niko Home Control offers an energy-saving solution:
  - Zones are no longer **heated unnecessarily**.
  - Upon arrival back home, certain rooms are already **preheated** using the eco-setting.
  - The heating system switches to the **eco-setting** when the resident leaves the house or goes to sleep.
  - The heating system is turned off, for instance, when one of the windows is opened.
  - The sun blinds automatically close during the resident's absence or as soon as the set indoor temperature is exceeded.


22°C.5
P2
18:45

Zone heating with hydraulic (hot water) system

Modern boilers are fitted with several intelligent controls to establish a heating line that takes into account the ambient temperature, the running of the circulation pump after the heating process has been completed, etc. Niko Home Control is not meant to change these functions. Manufacturers of boiler systems do know what is best and how certain functions should be controlled.

Niko Home Control **adjusts the heat supply to each individual zone and notifies the boiler** when **more heating** is required in one or several zones. This is possible in modern boilers by using the dedicated contact input.

How does Niko Home Control adjust the temperature in all the different zones?

The Niko Home Control **thermostat** determines whether a certain room requires heating or cooling. An **electronic valve** adjusts the supply fed to that room. You mount the electronic valve onto a manifold or radiator.

The most commonly used electronic valves are 'on/off' valves with control voltage (230V) or low voltage (24V or 12V). When setting the delay time, make sure to take the specifications of the valves used into account.

Connecting the heating control unit to the heating system

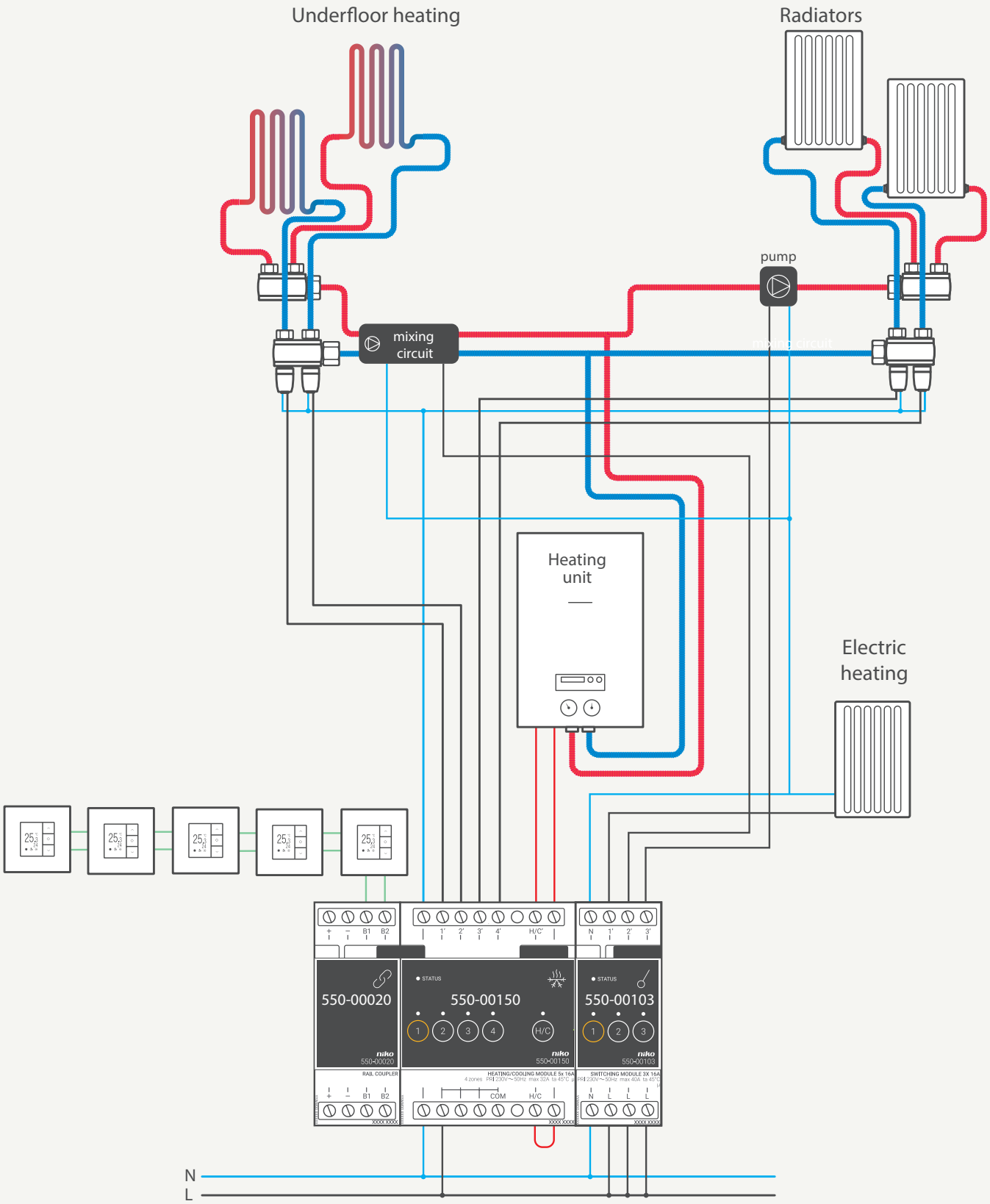
Niko Home Control can control heating systems with the following three types of outputs: zone valves, circulation pumps and electrical heating elements.

Depending on the components in the heating system, you will need a contact on one of the cabinet modules:

- zone valve: can be connected to output 1-4 of a heating module
- circulation pump, heating system with 1 output or cooling system with 1 output: can be connected to output 5 (H/C contact) of the heating module or an output on a three- or six-fold switching module
- electric heating: can be connected to output 1-4 of the heating module or an output of the three- or six-fold switching module

This way you have the suitable solution for a number of installations. Just make sure you provide a thermostat for each zone you wish to control separately.

Example wiring diagram: heating system



6 examples:

1. The heating system controls the heating unit whenever heating is required

Most boilers have a contact input to control the installation with another thermostat than its own. Simply connect the Niko Home Control HC contact to this contact input.

When more heat is required, the Niko Home Control HC contact closes. This informs the boiler that the water needs to be heated. As soon as the contact opens, the boiler knows that heating is no longer required. The boiler will then initiate its own procedure to close down, which includes letting the circulation pump run for a few minutes to reduce the residual heat within the boiler.

The heating unit maintains its modular capacity. because the boiler adjusts its water temperature based on the outside temperature and the return temperature of the water.

2. Niko Home Control controls the circulation pump in hot water reservoir systems

In systems such as these, the boiler or hot water pump maintains a certain temperature for the water. Niko Home Control controls the circulation of the water whenever heating is required in one or several zones. The heating unit maintains its modular capacity.

3. Zone heating with electric heating

You can use the Niko Home Control thermostats to control electric heating in 1 or several zones. To do this, you will need a thermostat and a heating unit in each zone which you wish to control separately. The control can be programmed with an action in the programming software. Electric heating systems can be connected to output 1-4 of a heating module or an output of a switching module.

4. Heat pump with passive cooling

Niko Home Control can also control systems with heat pumps. With the thermostat you can control the different zones. This is possible if the heat pump is set to provide passive cooling of the home during a warm period. Be aware that one system can never provide heating and cooling at the same time! As a result, you can only switch the system when all thermostats are off or in the same mode.

5. Combination underfloor heating/radiators

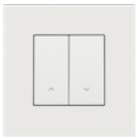
In many homes, traditional radiators in the bedroom are combined with underfloor heating in the living room. This combination can also be controlled by Niko Home Control.

6. Combination

The above mentioned situations can also be combined as long as there is only one type of heating present in each zone and only 1 thermostat.

Motor control of roller blinds, sun blinds and curtains

These days, many houses are fitted with motorised roller blinds, sun blinds or curtains. At night, roller blinds provide **protection and a feeling of security**, whilst **keeping out unwanted sunlight** during the day. Sun blinds help maintain a **comfortable temperature inside the home** and help reduce **glaring sunlight**. These features are useful, but they require a lot of running back and forth each day. Niko Home Control lets the resident close the roll-down shutters automatically at night while he is away, or roll down the sun blinds automatically when needed. Once again, Niko Home Control addresses the resident's needs.



Easy installation

- **Modular installation:**
  - Ultrasimple dimensioning: one module controls three, to be switched separately, motors.
- **A simple, quick and orderly installation process:**
  - By using a sliding contact, you do not need to interconnect the bus via cables.
  - If the cabinet is not provided with a terminal strop, connect the neutral conductor to the modules via clamps.
  - ultra-compact modules require minimal space in the electrical cabinet.
  - Operation mode programmable via the programming software: preferred settings, running time for opening and closing …

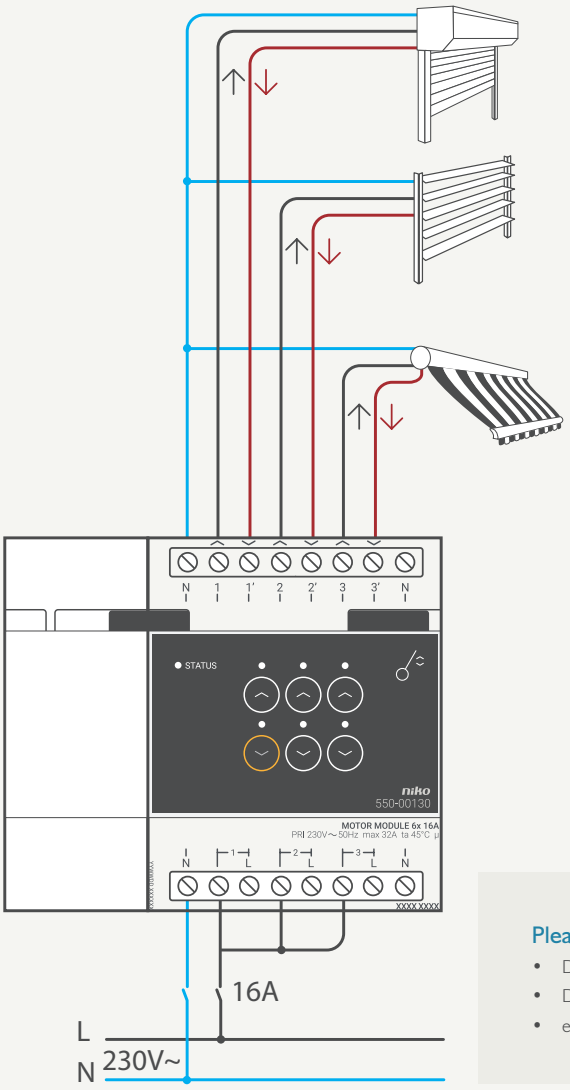
Easy control

- **Sense of security:**
  - Even when the resident is not at home, the roller blinds will be closed automatically or the curtains will close, at whichever time and for however long he wants.
  - Indication LEDs ensure that the resident easily finds the control unit in the dark.
- **User-friendly and comfortable control:**
  - push buttons
  - automatic control based on calendar settings and heat sensors: get the most out of the heat of the sun
  - central control via touchscreen
  - smartphone and tablet, also when you are not at home
  - **personal settings** possible, e.g. when watching television
- **Compact control units** require minimal space and follow the design of other Niko switching materials.
- Using **remote control** the resident can set the sun blinds **in the desired position from outside of the home**. He can attune the ventilation, the sun blinds, and the air conditioning to each another.
- The user can **add or adjust moods or automatic time settings** in the programming software.

Saving energy

- **Automatic operation of sun blinds** eliminates the need for energy wasting air-conditioning units. As soon as the heat reaches a certain temperature, the sun blinds are closed, even when no one is at home at the time. This **saves energy** and **prevents the home from becoming too hot**.

Example wiring diagram: control of 230V motors for roller shutters or awnings



Please note

- Do not connect different phases to the same module.
- Do not switch different voltage levels on the same module.
- each channel can have a maximum capacity of 6A.

Control of Venetian blinds and vertical blinds

Venetian blinds and vertical blinds offer **privacy** and keep out **unwanted sunlight**. Niko Home Control makes it **user-friendlier** to operate these blinds. The operation runs automatically, even when the resident is not at home. This energy-efficient solution ensures that indoor temperatures are kept within limits.

Easy to install

- Modular installation:
  - **Ultrasimple dimensioning:** one module controls up to three Venetian blinds or vertical blinds.
- A simple, quick and orderly installation process:
  - By using a sliding contact, you do not need to interconnect the bus via cables.
  - You select the control logic via the software.
  - ultra-compact modules require minimal space in the electrical cabinet.
  - Venetian blinds/vertical blinds and motors are controlled via the same module.
  - Operation mode programmable via the programming software: preferred settings, running time for opening and closing …

Easy control

- **Indication LEDs** ensure that the resident easily finds the control unit in the dark.
- User-friendly and comfortable control:
  - push buttons
  - automatic control based on calendar settings and heat sensor
  - central control via touchscreen
  - smartphone and tablet, also when you are not at home
- **Compact control units** require minimal space on the wall and follow the design of other Niko switching materials.
- Using **remote control** the resident can set the venetian and vertical blinds **in the desired position from outside of the home** . He can attune the ventilation, venetian/vertical blinds and air conditioning to each another.

Saving energy

- **Automatic operation of Venetian blinds and vertical blinds** eliminates the need for energy wasting air-conditioning units. Even when no one is home, the Venetian blinds or vertical blinds will be closed as soon as the temperature in the resident's home reaches a certain level. This guarantees cooler temperatures inside the home **upon arrival back home.**

A motor for operating venetian blinds and vertical blinds

A 230 Vac or 24V DC motor operates the venetian blinds or vertical blinds. 230 Vac operation works the same as roller blinds operation. For 24V DC operation, you need **two switching contacts for each venetian blind or vertical blind**. These contacts are available from the supplier.

Position adjustment of venetian blinds or vertical blinds

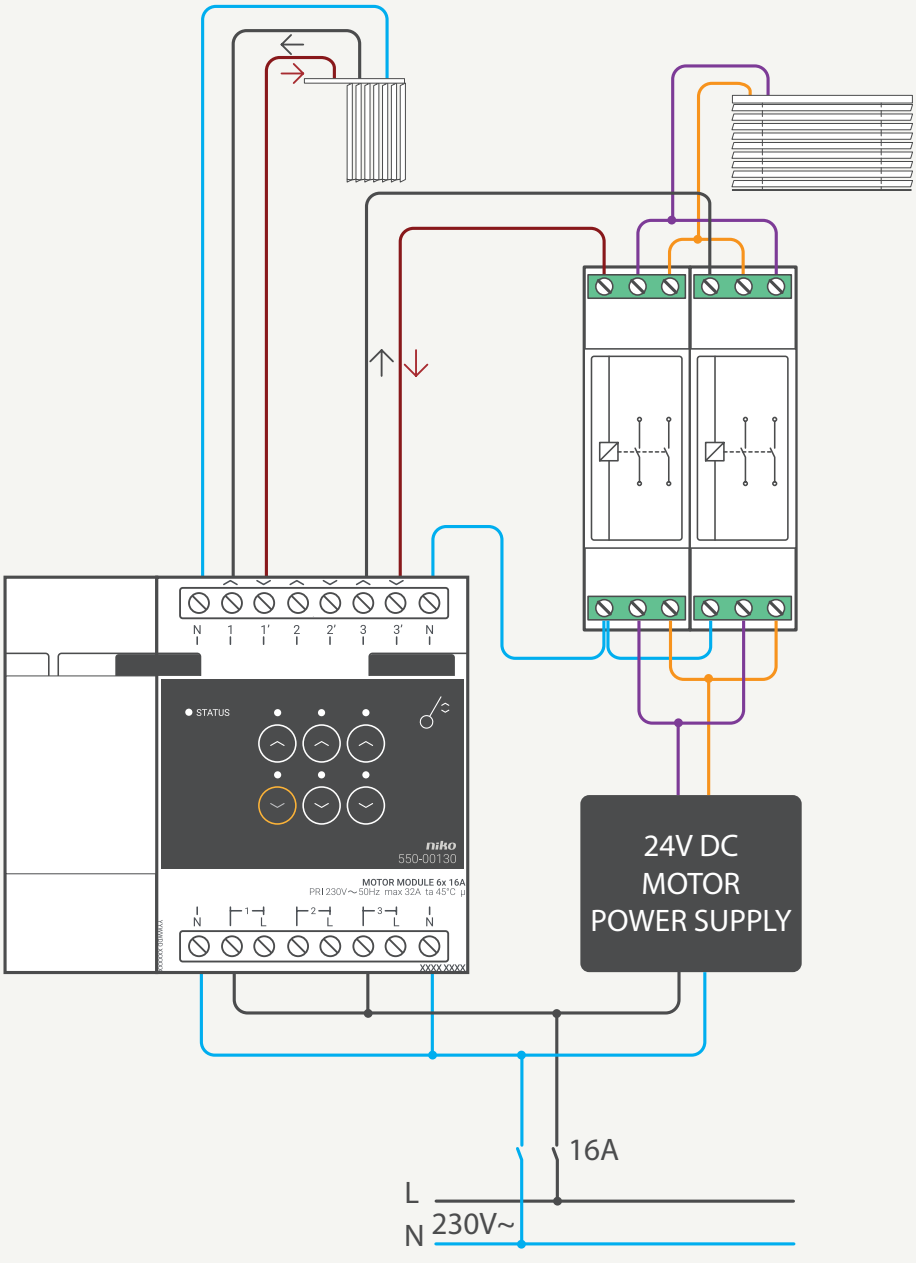
You can turn or tilt venetian blinds or vertical blinds in **several different positions** to let in or keep out the desired amount of light.

2 operation modes for venetian blinds or vertical blinds:

- pulse control for brief tilting or turning time
- standard roll-down shutter control with longer tilting or turning time

Use the programming software to set the operation mode. The motor module is able to generate very brief pulses (minimum 40 ms) to allow for accurate control.

Example wiring diagram: control of motor for venetian blinds or vertical blinds



Safety

The resident feels safe and secure in his own home. Yet, unfortunately, there are still many things that can potentially go wrong. In case of fire, he wants to get out of the house as quickly as possible. If movement is detected whilst the resident is away from home, he wants to be notified immediately by a push message on his smartphone. Or, after having unwanted trespassers on the premises, the feeling of security can be difficult to recover. Niko Home Control helps the resident maintain his feeling of security without having to go through an experience like that.

Examples of Niko Home Control solutions

- Thanks to the **presence simulation** it seems like someone is always home: when it's dark every once in a while a light switches on, the roller blinds open and shut automatically ...
- Via a **connection to the alarm centre**, the lights will start flashing as soon as the indoor siren goes off.
- **Motion detectors** not only automatically control the lighting, they can also activate the indoor siren when nobody is present or send a push message to a smartphone.
- Does the resident hear something suspicious at night? Via a **panic button** in the bedroom, the resident can switch all lighting in the garden.
- By **orientation lighting** in the hallway or on the stairs, the resident can walk around the house safely at night without switching on the light.
- A **smoke detector** detects fire: the lighting switches on and the roller blinds go up so the resident can quickly make his way outside.
- Connection to an **external video unit**: the resident decides who he lets into the house, even when he is not home.
- **Sunblinds** are **controlled based on measured sunlight, wind and temperature.**

Easy to install

- **Convenient programming** due to the naming of sensors using the programming software.
- **Modular installation:**
  - Maximum of three sensors per module
  - Simple addition of extra modules

Easy control

- When leaving the house, the resident activates presence simulation **with the same button** with which the eco-setting is activated.
- **Remote control.** On holiday or having a night out? With one click on the smartphone or tablet the resident:
  - can check the gas, water and electricity consumption.
  - checks whether he forgot to switch off devices and still do so.
  - controls the roller blinds or activates the presence simulation.
  - sees where and when motion was detected inside the home.
  - monitors whether the safety installation has noted an alarm (e.g. a garage door which isn't closing or movement detected in the living room).
  - sees who is at the door, can talk to the visitor and let them in.

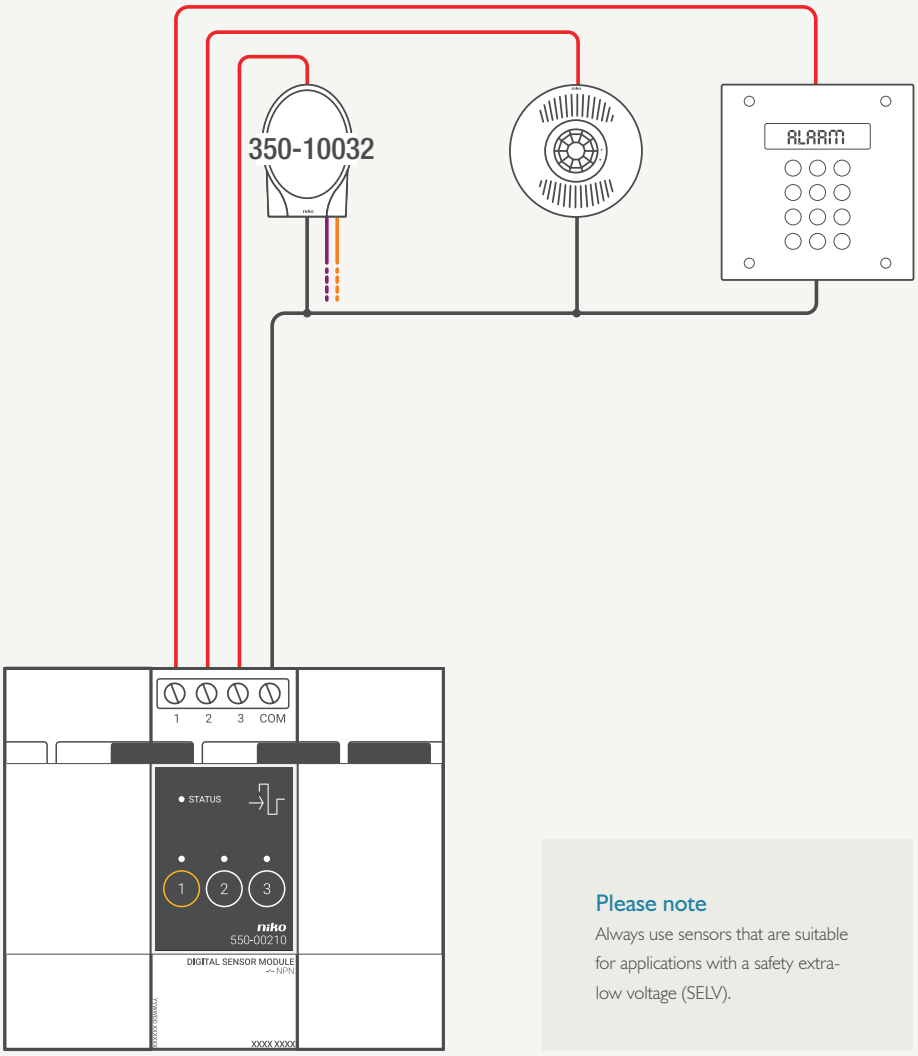
Saving energy

- Via the program, the resident can choose to utilize **only** the **energy-efficient lighting sources** in presence simulation.
- Upon leaving the house, the resident switches off all devices which do not need to remain on at once via the **all-off button**.

Three external analogue sensors are connected to the Niko Home Control installation using the analogue sensor module.

With the digital, potential-free sensor module, you connect a maximum of three sensors via an NO contact or an NPN transistor output. The module has a common connection terminal to which you connect the earth of the sensors.

Example wiring diagram: sensors connected via sensor module



Please note

Always use sensors that are suitable for applications with a safety extra-low voltage (SELV).

Access control

Residents decide who to let in without walking to the door and/or front gate. The **external video unit,** available **with one or two touch buttons, offers the solution**. Depending on the version, one or two zones can be called. The **touchscreen** shows who is at the door and allows the resident to communicate with the visitor and let them in. It even shows who has been at the door during your absence. In addition, you can use your smartphone or tablet anywhere in the world as additional internal video unit(s) with the same functionalities.

Examples of common applications:

- doctors, dentists, physiotherapists … with a private practice in the home
- shop owners living above their shop
- parents and children in an intergenerational home

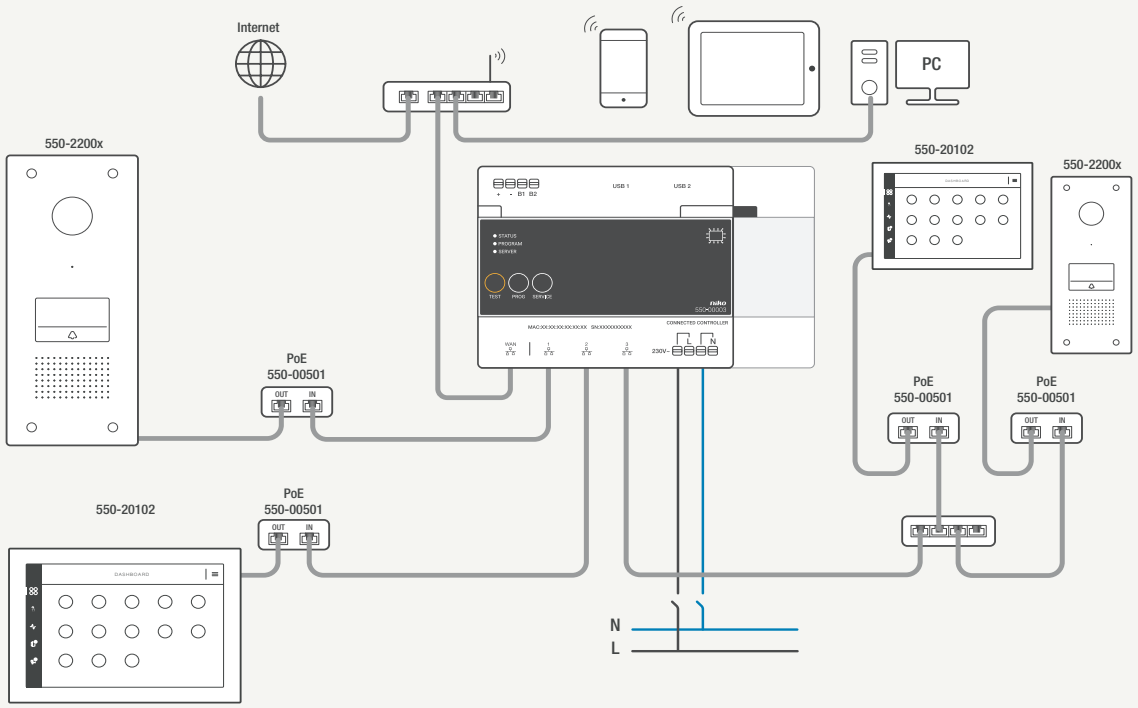
Easy to install

- **Access control is easily integrated into your installation**
  - You only need one Ethernet cable.
  - The external video unit is connected directly to the connected controller.
  - The control logic is in the connected controller.
  - The Niko Home Control modules control extra actions such as electric door locks.

Easy control

- **Great ease of use:**
  - The resident opens the door and/or gate via the touchscreen, the Niko Home Control application anywhere in the world or even simply via a Niko Home Control control.
  - **Flexible control** via the touchscreen, possibly supplemented by a smartphone or tablet.
  - The external unit is equipped with a HD-camera with a 130° detection angle. The camera automatically makes a video recording of everyone who rings the doorbell. This way, the resident can consult missed calls on the touchscreen.
  - Thanks to the full-duplex speech connection, the residents and visitors can communicate with each other without having to wait until the other has finished talking.
  - The integrated microphone reduces background noises such as the sounds of a noisy street to a minimum.
  - The touch buttons (piezo buttons) even respond to gloves. Vandalism, damage and wear as seen with old push buttons are a thing of the past.
  - The resident hears a waiting tune as soon as he rings the bell, this way he knows his visit was registered.
- **User-friendliness**
  - The access control is completely integrated into Niko Home Control.
  - A logical user interface makes it very easy for the resident. Via the tab 'access control' he can speak with the visitor, let him in, adjust the sound volume, open the door and/or gate …
- **Contemporary design:**
  - The external video unit fits seamlessly with the Niko Home Control design.
  - The design is sleek, flat and modern.
  - A simple, pleasant shape with flat touch buttons which form a whole with the front plate.
  - The engraved name and doorbell symbol are subtly and homogeneously lit.
  - The design of the external video unit was awarded with the Red Dot Design Award in 2014.

Example wiring diagram: external video unit
with single touch button



Connection in no time

You connect the external unit and the connected controller with a twisted pair cable (UTP, FTP or STP) and RJ45 connectors:

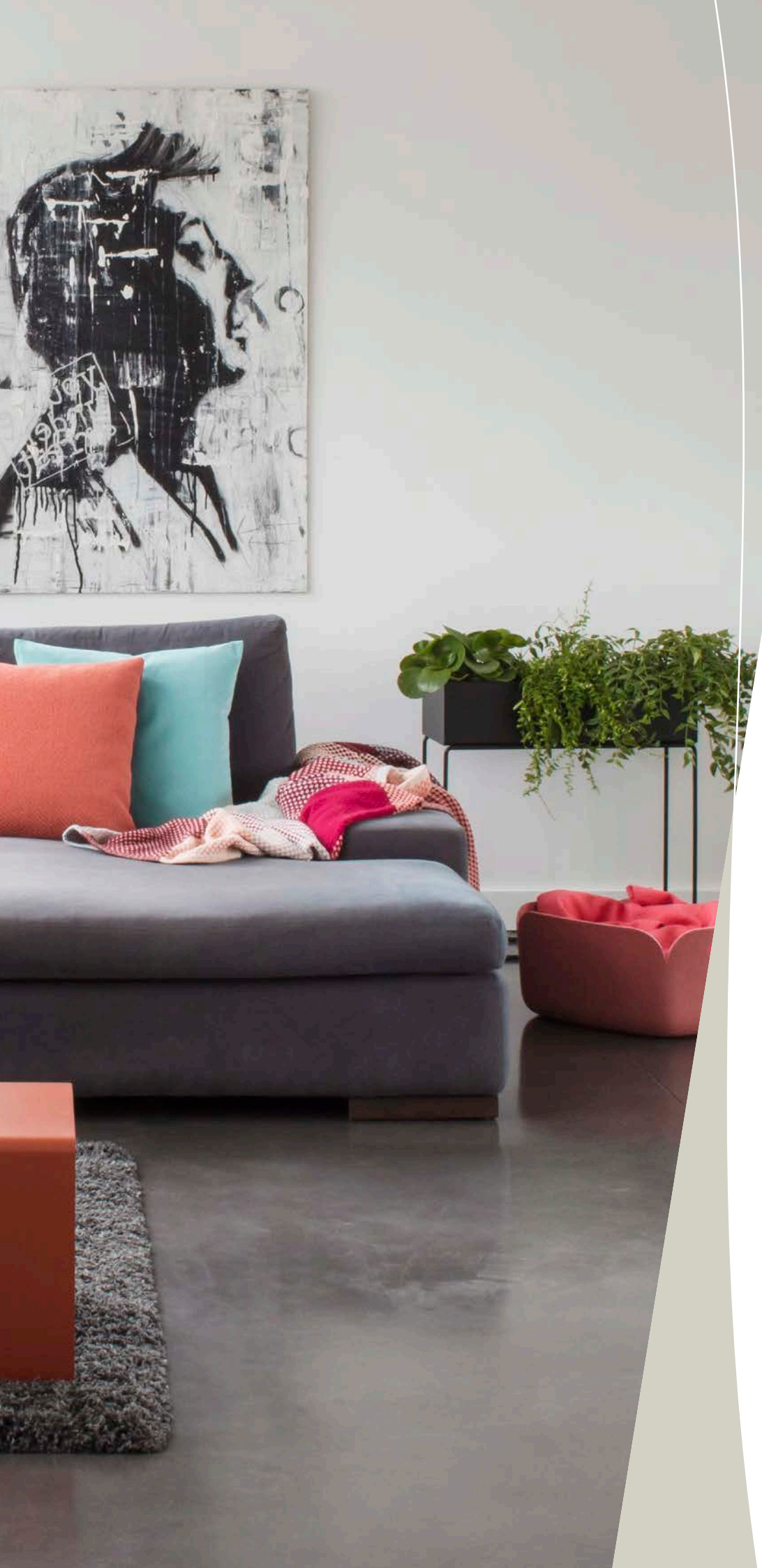
- from external unit to the Power over Ethernet power supply (PoE)
- from the PoE power supply to the RJ45 port 1, 2 or 3 of the connected controller. If more than 3 devices are to be connected, use an Ethernet switch.

In the external unit itself, the wires of the cable are placed in the approach terminals.

The connected controller receives the function of a SIP server and knows where to send the incoming calls:

- to the touchscreen, via cable.
- and/or to the application on a smartphone or tablet, via WiFi.


DASHBOARD



Collaboration of Niko Home Control with other systems

Hassle-free connection

When redesigning Niko Home Control, we looked at ways to form functional and validated partnerships with other manufacturers.

In first instance, we started collaborating with Renson, Velux and Reynaers. With Niko Home Control, we aim to provide a connection with these partner systems in a controlled and validated manner. In the future, more partners will be added to this list.

1. Automatic and smart ventilation with Renson

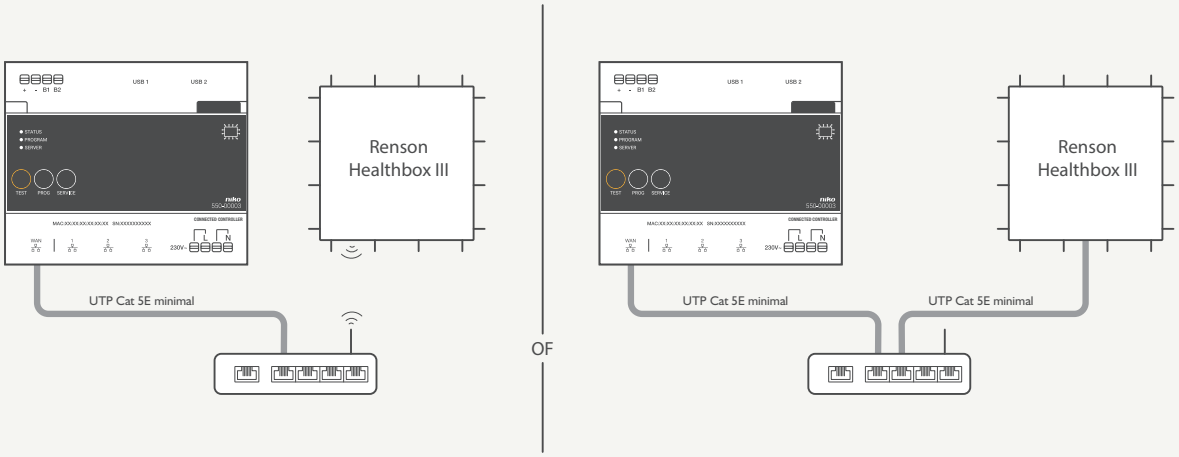
Connect the Renson Healthbox 3 to Niko Home Control. Is the indoor air quality good in the home? Does one of the rooms need additional ventilation? You can see it immediately on the Niko Home Control touchscreen.

You will need the following:

- Renson Healthbox 3
- Niko Home Control with programming software version 2.0 onwards and a touchscreen
- network connection for both installations

Conditions

Niko Home Control and the Renson Healthbox 3 must be connected to the same network



RENSON®
Creating healthy spaces

2. Control electric roof windows and roller blinds with Velux

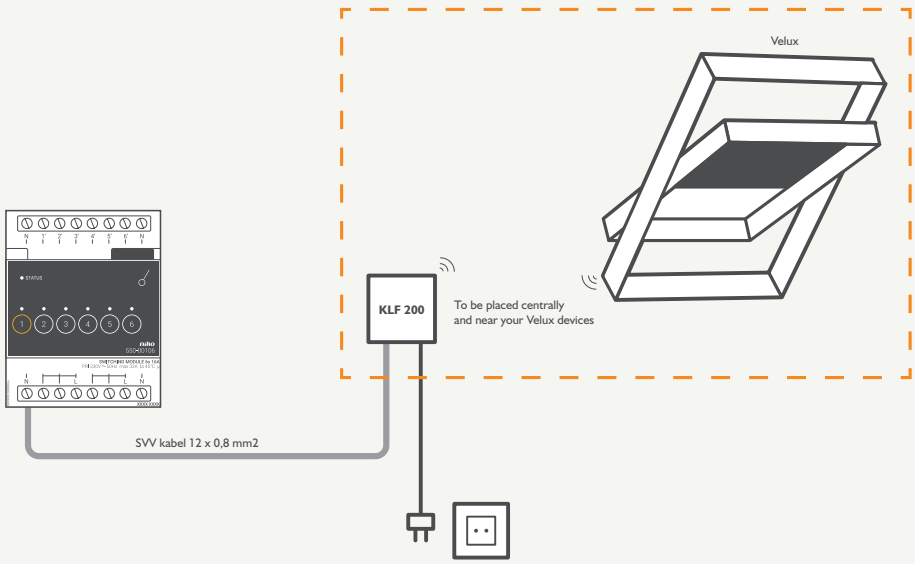
Control your electric windows and roller blinds from Velux with Niko Home Control. Make the connection with a Velux KLF 200 module. It has 5 output channels. With 1 output channel you can control 1 window or roller blind or 1 group of devices. Connect 1 device or group of devices to 2 outputs of a Niko Home Control switching module.
An SVV cable containing 1 common wire and two control wires per device, runs between the switching module and the KLF 200 module. Are you using all 5 channels of the KLF 200 module? In that case, you will need 2 six-fold Niko Home Control switching modules and an SVV cable with a minimum of 12 conductors.

You will need the following:

- Niko Home Control with programming software version 2.0 onwards
- a Niko Home Control switching module with 2 free outputs for each Velux device
- 1 roller blind control per device or group of devices to open and close them
- Velux KLF 200 module
- SVV cable with a minimum of 12 conductors between the cabinet and the KLF 200 module

Conditions

- you can control a maximum of 5 devices or groups per KLF 200 module.
- The KLF 200 module is ideally located near your Velux windows or roller blinds.



VELUX®

3. Control electric windows with Reynaers

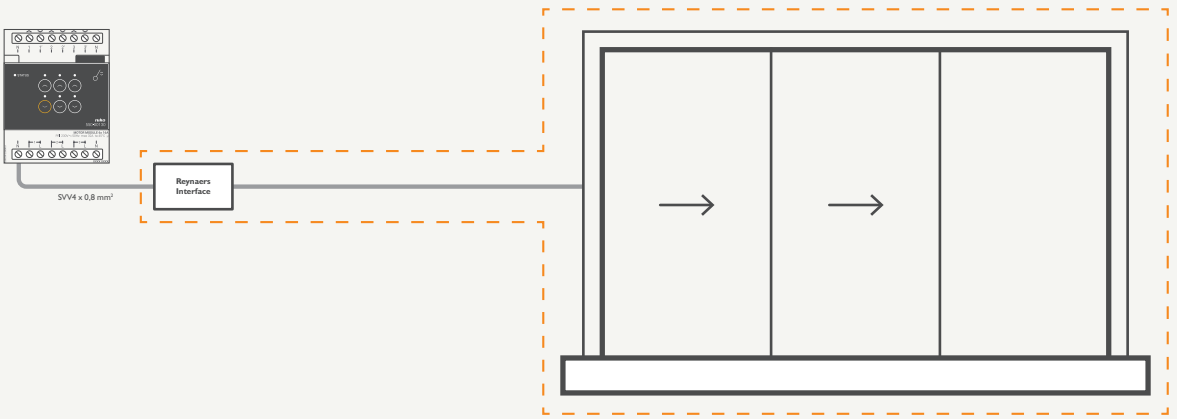
Have you chosen for electric windows from Reynaers? Then you can connect them to Niko Home Control with a Reynaers interconnecting module.
With one press on the button, you can open or close your window or put it in a specific position.

You will need the following:

- Niko Home Control with programming software version 2.0 onwards
- a Niko Home Control switching module with 2 free outputs per window
- a Reynaers interconnecting module
- an SVV cable with a minimum of 3 wires between the switching module and the interconnecting module
- 1 roller blind control per window

Conditions

You always need a Reynaers interconnecting module.



Part of the installation of a Reynaers window

4. Audio control with Sonos and Bose

Link your connected Sonos and Bose loudspeakers to Niko Home Control to add audio to your installation the smart way.

With the new audio control, you can turn the power on or off, or adjust the volume. In addition, the desired music from your list of favourites can be selected with the touchscreen or smartphone.

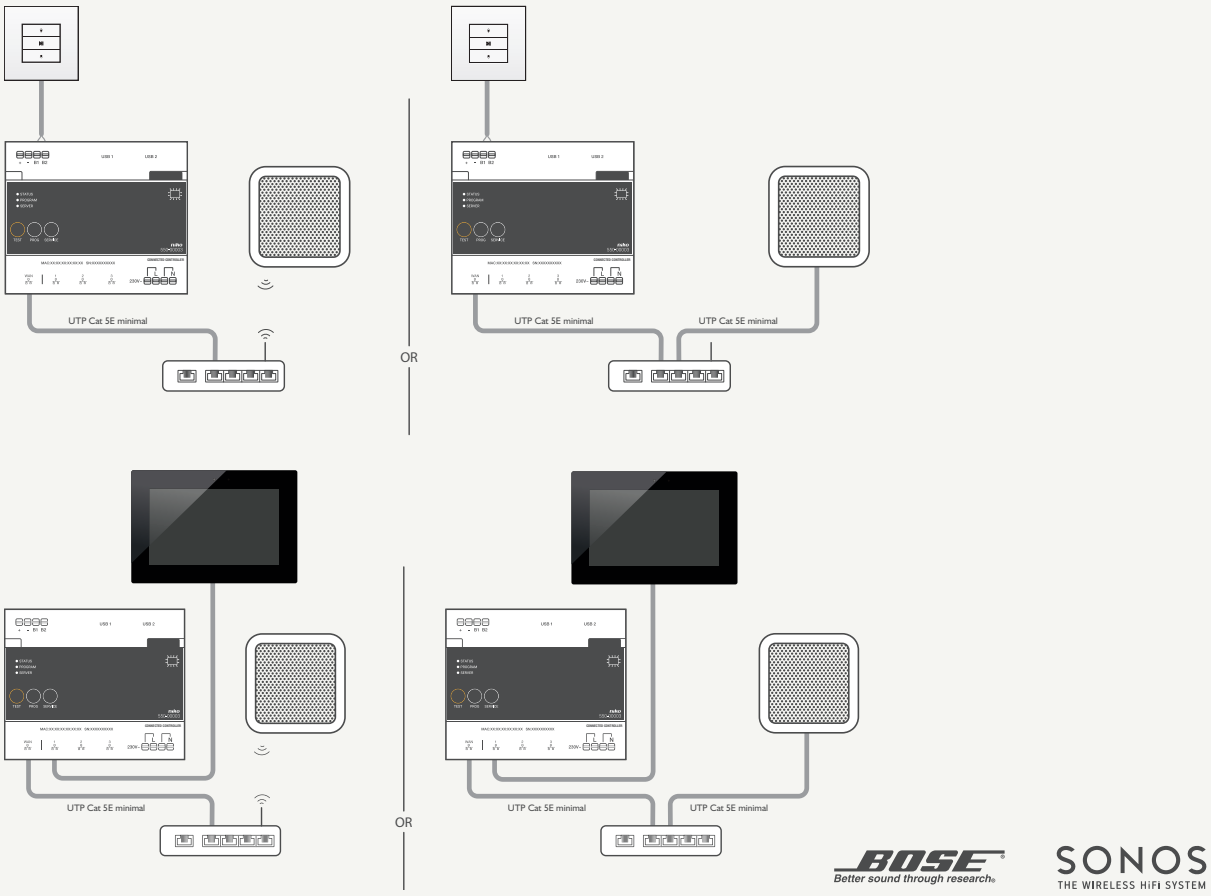
To make life even easier, audio can be added to many specific actions within Niko Home Control. For example, your favorite music starts at the right volume when selecting an atmosphere, the all-off button also turns off your audio devices or automatically lowers the volume of your audio devices when a visitor calls.

You will need the following:

- Niko Home Control with programming software version 2.1 onwards
- At least 1 audio control (xxx-52073) or touchscreen to activate the audio function.
- Any Sonos device or a compatible Bose device (Soundtouch 10, 20 or 30)
- Network connection for both your Niko Home Control and your audio installation (wired or wireless)

Conditions

Niko Home Control must be connected with the same network as your audio devices.




DASHBOARD
Living room
19.5
21.5
Temperature
Call & enter
Front door
Light Hall
PC socket
Sun Screen
All Shutters
Alarms
Light Kitchen
CLOSE
STOP
OPEN

Niko Home Control online

Website

More information about Niko Home Control can be found on our website under the tab 'Help and advice'. Request a quote based on your plans or quotation for a standard system. This allows you to provide your client with all necessary information. You can also download our brochures there, or have them sent to you free of charge.
www.niko.eu

Registration

Ask your customers to register their installation on **https://mynikohomecontrol.niko.eu**. This way, you can better help them together with Niko support in case of issues and they can receive important system updates. This registration is also necessary in order to activate the control with smartphone and/or tablet.

Software manual

The online manual familiarising you step-by-step with the Niko Home Control installation. You can find information on the basic functions, frequently used programmings, the cabinet lay-out and the actual installation. It is a useful guide after the training or during the installation. You can also download and print the software manual. Go to **guide.niko.eu**, select "Help and advice" and click on "System manuals".

Flush surround plates

Niko Pure

Do you love an **ultra sleek design** in timeless materials? Then you will love the refined look of Niko Pure. A series made from special materials full of character and emotion such as bamboo, stainless steel, Bakelite and Plexiglas. Your guarantee of an elegant and sustainable finish. Affordable top design.


liquid snow white


white steel


stainless steel on white


champagne steel


alu gold


natural soft grey


alu grey


stainless steel on anthracite


bamboo


natural red


alu steel grey


alu black


black steel


Bakelite® piano black

Trend finishings


dark bamboo on gold


dark bamboo on anthracite

Niko Intense

Niko Intense, a series that you must feel. Niko Intense is all about touch. The **sleek shape** and **soft lines** radiate intensity. With these switches you are choosing a distinctly warm character.


white


sterling


bronze


dark brown


anthracite

Niko Original

Are you attracted to **soft lines** and **mild colours**? Then Niko Original is just what you are looking for. You are choosing a finish which is discreetly omnipresent.


white


cream


light grey

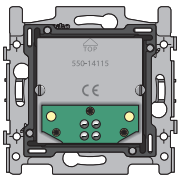

grège

Ready to choose?

Download the Switch Niko app in the App Store or on Google Play. The contrasting Niko image is available on: **www.niko.eu/switch-niko-app.**


HAVE
a
Wonderful
DAY

Product overview
Niko Home Control



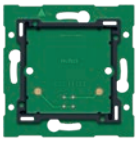
Single wall-mounted printed circuit board with base

The wall-mounted printed circuit board allows you to connect a control unit to the system. The wall-mounted printed circuit board is mounted onto an existing flush-mounting box or on very uneven walls. Several wall-mounted printed circuit boards with bridge can be clicked together. The wall-mounted printed circuit board with base can be used in combination with any Niko flush-mounting system.

- double plug-in connector: connection of two wires per contact possible, each with a diameter of 0.5 to 1 mm
- mounting of the push button: click mechanism
- wall mounting: screws or claws

COMPLETE DEVICE

550-14115	Items: 6	Single wall-mounted printed circuit board with bridge



Single wall-mounted printed circuit board with connector

The wall-mounted printed circuit board allows you to connect a control unit to the system. The wall-mounted printed circuit board with dual plug-in connector is mounted onto a single standard flush-mounting box with screw fixing. For flush-mounting boxes without screw fixing, you must order a set of claws separately.

- double plug-in connector: connection of two wires per contact possible, each with a diameter of 0.5 to 1 mm
- mounting of the push button: click mechanism
- wall mounting: screws or claw set

COMPLETE DEVICE

550-14110	Items: 10	Single wall-mounted printed circuit board with connector

ACCESSORIES

450-00067	Items: 20	Set of claws for wall-mounted printed circuit board

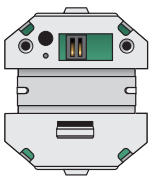
Multiple wall-mounted printed circuit board for use with connection unit

The multiple wall-mounted printed circuit board is mounted onto a single standard flush-mounting box with screw fixing. No additional flush-mounting boxes are required for the assembly of multiple flush-surround plates. Decide whether you prefer to work towards the top, bottom, left or right from the flush-mounting box. In doing so, you add push buttons without having to perform any drilling or channelling work. For flush-mounting boxes without screw fixing, you must order a set of claws separately. Caution: a connection unit should always be ordered with multiple wall-mounted printed circuit boards. The connection unit provides the connection between the multiple wall-mounted printed circuit boards and the installation.

- mounting of the push button: click mechanism
- wall mounting: screws or claw set

WALL-MOUNTED PRINTED CIRCUIT BOARDS

550-14020	Items: 10	Double wall-mounted printed circuit board (centre-to-centre distance 71 mm, horizontal)
550-14021	Items: 10	Double wall-mounted printed circuit board (centre-to-centre distance 60 mm, vertical)
550-14027	Items: 10	Double wall-mounted printed circuit board (centre-to-centre distance 71 mm, vertical)
550-14030	Items: 10	Three-fold wall-mounted printed circuit board (centre-to-centre distance 71 mm, horizontal)
550-14031	Items: 10	Three-fold wall-mounted printed circuit board (centre-to-centre distance 60 mm, vertical)
550-14037	Items: 10	Three-fold wall-mounted printed circuit board (centre-to-centre distance 71 mm, vertical)
550-14040	Items: 10	Four-fold wall-mounted printed circuit board (centre-to-centre distance 71 mm, horizontal)



Connection unit for multiple wall-mounted printed circuit board

The connection unit connects the system to the multiple wall-mounted printed circuit board. The connection unit can be mounted anywhere on the multiple wall-mounted printed circuit board. Note: Use a different set of claws.

- double plug-in connector: connection of two wires per contact possible, each with a diameter of 0.5 to 1 mm
- mounting on wall-mounted printed circuit board: two screws

COMPLETE DEVICE

550-14090	Items: 6	Connection unit for multiple wall-mounted printed circuit board

ACCESSORIES

450-00068	Items: 20	Set of claws for connection unit

Single push button

You can perform one operation with this push button. Each action button can either control a light point or a light circuit, dim a dimmable light point up or down or activate a mood setting. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-51001	Items: 6	**101-51001**	Items: 6	**102-51001**	Items: 6
104-51001	Items: 6	**121-51001**	Items: 6	**122-51001**	Items: 6
123-51001	Items: 6	**124-51001**	Items: 6	**154-51001**	Items: 6
157-51001	Items: 6	**161-51001**	Items: 6	**200-51001**	Items: 6
220-51001	Items: 6	**221-51001**	Items: 6		

Single push button with LED

You can perform one operation with this push button. Each action button can either control a light point or a light circuit, dim a dimmable light point up or down or activate a mood setting. The action button is fitted with an amber-coloured indication LED to indicate the status of the action. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-52001	Items: 6	**101-52001**	Items: 6	**102-52001**	Items: 6
104-52001	Items: 6	**121-52001**	Items: 6	**122-52001**	Items: 6
123-52001	Items: 6	**124-52001**	Items: 6	**154-52001**	Items: 6
157-52001	Items: 6	**161-52001**	Items: 6	**200-52001**	Items: 6
220-52001	Items: 6	**221-52001**	Items: 6		

Double push button

With this push button, you can perform two operations. Each action button can either control a light point or a light circuit, dim a dimmable light point up or down or activate a mood setting. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-51002	Items: 6	**101-51002**	Items: 6	**102-51002**	Items: 6
104-51002	Items: 6	**121-51002**	Items: 6	**122-51002**	Items: 6
123-51002	Items: 6	**124-51002**	Items: 6	**154-51002**	Items: 6
157-51002	Items: 6	**161-51002**	Items: 6	**200-51002**	Items: 6
220-51002	Items: 6	**221-51002**	Items: 6		

Double push button with LEDs

With this push button, you can perform two operations. Each action button can either control a light point or a light circuit, dim a dimmable light point up or down or activate a mood setting. Each action button is fitted with an amber-coloured indication LED to indicate the status of the action. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-52002	Items: 6	**101-52002**	Items: 6	**102-52002**	Items: 6
104-52002	Items: 6	**121-52002**	Items: 6	**122-52002**	Items: 6
123-52002	Items: 6	**124-52002**	Items: 6	**154-52002**	Items: 6
157-52002	Items: 6	**161-52002**	Items: 6	**200-52002**	Items: 6
220-52002	Items: 6	**221-52002**	Items: 6		

4-fold push button

The 4-fold push button has four action buttons. Each action button can either control a light point or a light circuit, dim a dimmable light point up or down or activate a mood setting. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-51004	Items: 6	**101-51004**	Items: 6	**102-51004**	Items: 6
104-51004	Items: 6	**121-51004**	Items: 6	**122-51004**	Items: 6
123-51004	Items: 6	**124-51004**	Items: 6	**154-51004**	Items: 6
157-51004	Items: 6	**161-51004**	Items: 6	**200-51004**	Items: 6
220-51004	Items: 6	**221-51004**	Items: 6		

4-fold push button with LEDs

The 4-fold push button has four action buttons. Each action button can either control a light point or a light circuit, dim a dimmable light point up or down or activate a mood setting. Each action button is fitted with an amber-coloured indication LED to indicate the status of the action. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-52004	Items: 6	**101-52004**	Items: 6	**102-52004**	Items: 6
104-52004	Items: 6	**121-52004**	Items: 6	**122-52004**	Items: 6
123-52004	Items: 6	**124-52004**	Items: 6	**154-52004**	Items: 6
157-52004	Items: 6	**161-52004**	Items: 6	**200-52004**	Items: 6
220-52004	Items: 6	**221-52004**	Items: 6		

6-fold push button

The 6-fold push button has six action buttons. Each action button can either control a light point or a light circuit, dim a dimmable light point up or down or activate a mood setting. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-51006	Items: 6	**101-51006**	Items: 6	**102-51006**	Items: 6
104-51006	Items: 6	**121-51006**	Items: 6	**122-51006**	Items: 6
123-51006	Items: 6	**124-51006**	Items: 6	**154-51006**	Items: 6
157-51006	Items: 6	**161-51006**	Items: 6	**200-51006**	Items: 6
220-51006	Items: 6	**221-51006**	Items: 6		

6-fold push button with LEDs

The 6-fold push button has six action buttons. Each action button can either control a light point or a light circuit, dim a dimmable light point up or down or activate a mood setting. Each action button is fitted with an amber-coloured indication LED to indicate the status of the action. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-52006	Items: 6	**101-52006**	Items: 6	**102-52006**	Items: 6
104-52006	Items: 6	**121-52006**	Items: 6	**122-52006**	Items: 6
123-52006	Items: 6	**124-52006**	Items: 6	**154-52006**	Items: 6
157-52006	Items: 6	**161-52006**	Items: 6	**200-52006**	Items: 6
220-52006	Items: 6	**221-52006**	Items: 6		

Single dimming control

The single dimming control has one group of three action buttons. It enables the resident to dim one light point or a group of light points up or down. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-51043	Items: 6	**101-51043**	Items: 6	**102-51043**	Items: 6
104-51043	Items: 6	**121-51043**	Items: 6	**122-51043**	Items: 6
123-51043	Items: 6	**124-51043**	Items: 6	**154-51043**	Items: 6
157-51043	Items: 6	**161-51043**	Items: 6	**200-51043**	Items: 6
220-51043	Items: 6	**221-51043**	Items: 6		

Single dimming control with LEDs

The single dimming control has one group of three action buttons. It enables the resident to dim one light point or a group of light points up or down. The dimming control is fitted with an amber-coloured indication LED to indicate the status of the action. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-52043	Items: 6	**101-52043**	Items: 6	**102-52043**	Items: 6
104-52043	Items: 6	**121-52043**	Items: 6	**122-52043**	Items: 6
123-52043	Items: 6	**124-52043**	Items: 6	**154-52043**	Items: 6
157-52043	Items: 6	**161-52043**	Items: 6	**200-52043**	Items: 6
220-52043	Items: 6	**221-52043**	Items: 6		

Dual dimming control

The dual dimming control has two groups of three action buttons. It enables the resident to dim two light points or two groups of light points up or down. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-51046	Items: 6	**101-51046**	Items: 6	**102-51046**	Items: 6
104-51046	Items: 6	**121-51046**	Items: 6	**122-51046**	Items: 6
123-51046	Items: 6	**124-51046**	Items: 6	**154-51046**	Items: 6
157-51046	Items: 6	**161-51046**	Items: 6	**200-51046**	Items: 6
220-51046	Items: 6	**221-51046**	Items: 6		

Dual dimming control with LEDs

The dual dimming control has two groups of three action buttons. It enables the resident to dim two light points or two groups of light points up or down. The dimming control is fitted with an amber-coloured indication LED to indicate the status of the action. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-52046	Items: 6	**101-52046**	Items: 6	**102-52046**	Items: 6
104-52046	Items: 6	**121-52046**	Items: 6	**122-52046**	Items: 6
123-52046	Items: 6	**124-52046**	Items: 6	**154-52046**	Items: 6
157-52046	Items: 6	**161-52046**	Items: 6	**200-52046**	Items: 6
220-52046	Items: 6	**221-52046**	Items: 6		

Single motor control

The single motor control has one group of three action buttons. It allows the resident to control the motors of a group of roller blinds, sun blinds or venetian blinds. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-51033	Items: 6	**101-51033**	Items: 6	**102-51033**	Items: 6
104-51033	Items: 6	**121-51033**	Items: 6	**122-51033**	Items: 6
123-51033	Items: 6	**124-51033**	Items: 6	**154-51033**	Items: 6
157-51033	Items: 6	**161-51033**	Items: 6	**200-51033**	Items: 6
220-51033	Items: 6	**221-51033**	Items: 6		

Single motor control with LEDs

The single motor control has one group of three action buttons. It allows the resident to control the motors of a group of roller blinds, sun blinds or venetian blinds. The motor control is fitted with amber-coloured indication LEDs to indicate the status of the action. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-52033	Items: 6	**101-52033**	Items: 6	**102-52033**	Items: 6
104-52033	Items: 6	**121-52033**	Items: 6	**122-52033**	Items: 6
123-52033	Items: 6	**124-52033**	Items: 6	**154-52033**	Items: 6
157-52033	Items: 6	**161-52033**	Items: 6	**200-52033**	Items: 6
220-52033	Items: 6	**221-52033**	Items: 6		

Dual motor control

The dual motor control has two groups of three action buttons. It allows the resident to control the motors of two groups of roller blinds, sun blinds or venetian blinds. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-51036	Items: 6	**101-51036**	Items: 6	**102-51036**	Items: 6
104-51036	Items: 6	**121-51036**	Items: 6	**122-51036**	Items: 6
123-51036	Items: 6	**124-51036**	Items: 6	**154-51036**	Items: 6
157-51036	Items: 6	**161-51036**	Items: 6	**200-51036**	Items: 6
220-51036	Items: 6	**221-51036**	Items: 6		

Dual motor control with LEDs

The dual motor control has two groups of three action buttons. It allows the resident to control the motors of two groups of roller blinds, sun blinds or venetian blinds. The motor control is fitted with amber-coloured indication LEDs to indicate the status of the action. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-52036	Items: 6	**101-52036**	Items: 6	**102-52036**	Items: 6
104-52036	Items: 6	**121-52036**	Items: 6	**122-52036**	Items: 6
123-52036	Items: 6	**124-52036**	Items: 6	**154-52036**	Items: 6
157-52036	Items: 6	**161-52036**	Items: 6	**200-52036**	Items: 6
220-52036	Items: 6	**221-52036**	Items: 6		

Ventilation control with LEDs

The push button includes four action buttons: one for each setting of the central ventilation system (low, normal, high) and a boost button to activate the highest setting for a pre-set amount of time. The installation then returns to the previous setting. Each action button is fitted with an amber-coloured indication LED to indicate the status of the action. It is attached to the wall-mounted printed circuit board via a click mechanism.

COMPLETE DEVICE

100-52054	Items: 6	**101-52054**	Items: 6	**102-52054**	Items: 6
104-52054	Items: 6	**121-52054**	Items: 6	**122-52054**	Items: 6
123-52054	Items: 6	**124-52054**	Items: 6	**154-52054**	Items: 6
157-52054	Items: 6	**161-52054**	Items: 6	**200-52054**	Items: 6
220-52054	Items: 6	**221-52054**	Items: 6		

Push-button interface

The push-button interface converts a switching pulse from external push buttons (such as Niko Hydro) into a Niko Home Control bus command. The interface is installed behind the push button. The bus can be interconnected to next control element of the Niko Home Control installation. The push-button interface can be used in an outdoor environment provided that the unit is fitted with the splash-proof Niko Hydro housing.

- suitable for up to four potential-free N.O. push buttons or NPN transistor outputs
- only connect to a SELV contact (safety extra-low voltage)
- maximum distance to push button: 2 m
- resting potential: 26 Vdc (SELV)
- dimensions: 40 x 27 x 5 mm (HxWxD)
- CE marked
- ambient temperature: -25 - 55 °C

COMPLETE DEVICE

550-20000 Items: 6 Push-button interface

Mood control

The mood settings function allows residents to select the mood setting of their choice for each specific occasion. A mood setting is a combination of output settings with regard to lighting, roller blinds, sun blinds, etc.

- recommended installation height: 120 - 150 cm
- flush-mounting depth: 20 mm
- dimensions: 45 x 45 x 32 mm (HxWxD)
- resting potential: 26 Vdc (SELV, safety extra-low voltage)
- back-lit colour display with three buttons
- ambient temperature: 0 - 50 °C

COMPLETE DEVICE

550-13040 Items: 6 For claw fixing

Eco-display

The eco-display allows residents to monitor the energy, gas and water consumption as well as the amount of energy generated (if applicable) in their home. The display can also be used to activate the eco-function (all-off) or presence simulation function. The eco-display shows information on the electricity, gas and water consumption as well as the electricity production in the home. The type of information displayed will depend on the types of measuring modules installed. The electricity measuring module measures the electricity consumption or electricity production. The pulse counter communicates the electricity, gas and water consumption. The current electricity consumption is expressed in W or kW, while gas consumption is expressed in m^3. The total energy consumption for that week expressed in EUR, GBP or SEK is displayed underneath. The eco-function applies to all the lights and connected circuits that the resident wishes to switch off upon leaving the home. The reduction in energy consumption will be registered immediately. The resident presses the presence simulation button to activate the presence simulation function. In doing so, the lights switch on automatically at certain times and extra security is created with a minimum of energy.
The eco-display is best installed near the door through which the resident usually leaves the house.

This Niko Home Control ecodisplay has been awarded with the Red Dot Design Award 2011 .

- recommended installation height: 120 - 150 cm
- flush-mounting depth: 20 mm
- dimensions: 45 x 45 x 32 mm (HxWxD)
- resting potential: 26 Vdc (SELV, safety extra-low voltage)
- back-lit colour display with three buttons
- ambient temperature: 5 - 45 °C
- in conformity with IEC 60730-2-9, EN 50491-5-2, EN 50491-2 and EN 50090-2-3

COMPLETE DEVICE

550-13080 Items: 6 For claw fixing

Thermostat

The thermostat can be installed in any room fitted with underfloor heating, a radiator, heating unit or cooling unit. It controls the heating or cooling for the room in which it is mounted. The thermostat is used in combination with the heating or cooling module. In Niko Home Control II, you can also connect this to a three-fold or six-fold switching module for switching electric heating. As Niko Home Control controls the heating or cooling in different rooms, the resident can considerably save energy by linking the thermostat, for example, to the eco-function (all-off) or calendar-based functions (contrary to maintaining a fixed temperature throughout when using thermostatic taps, for instance).

- recommended installation height: 120 - 150 cm
- flush-mounting depth: 20 mm
- dimensions: 45 x 45 x 32 mm (HxWxD)
- resting potential: 26 Vdc (SELV, safety extra-low voltage)
- back-lit colour display with three buttons
- daily/weekly programmes
- 3 weekly programmes: two for the heating function and one for the cooling function
- 5 temperature settings: day, night, eco, off (frost-free) and cool
- programming precision: 0.5 °C
- protection degree: IP20
- ambient temperature: 5 - 40 °C
- conform IEC60730-2-9 , EN 50491-5-2, EN 50491-2 and EN 50090-2-3

COMPLETE DEVICE

550-13050 Items: 6 For claw fixing

Touchscreen

This touchscreen allows you to conveniently operate the entire Niko Home Control installation from one central point: switching and dimming the lighting, controlling the temperature, moving roller blinds and sun blinds to the position of your choice, monitoring the energy consumption and the status of the installation … Thanks to a built-in light sensor, the screen brightness adapts to the ambient light.

Thanks to the connection to the Niko Home Control external video unit, access control is also possible from now on. This way, you can answer incoming calls if you wish, and check missed calls. A feedback LED displays any missed calls, even when the device is in stand-by mode.

This touchscreen (550-20102) entirely replaces the touchscreen 2 (550-20101). In an existing Niko Home Control installation, it can both replace and complement this touchscreen. Furthermore, its wired connection to the home network ensures a permanent connection. We recommend providing at least one touchscreen in each installation on top of the smartphones and/or tablets because a wired device is always more reliable than a mobile one.

Only one flush-mounting box is needed to mount the touchscreen. You connect the touchscreen with one twisted pair cable (UTP, FTP or STP) to the Power over Ethernet power supply (PoE), which is available separately. Alternatively, you can also place a separate 24 Vdc power supply in the cabinet. A total of ten touchscreens, smartphone or PC applications can be used per installation.

- power supply voltage: 24 Vdc (± 10%) (SVV, JYSTY, TPVF, UTP, etc.) or Power over Ethernet (PoE) (UTP, STP, FTP) (48 Vdc)
- power consumption: 500 mA (24 Vdc) or 250 mA (PoE 48 Vdc)
- ambient temperature:
  - in operation: 0 - 40 °C
  - storage and transport: -10 - 65 °C
- Ethernet connection speed: 10 - 100 Mbit/s
- CE marked
- dimensions: 124 x 192 x 20 mm (HxWxD)
- screen size: 7”
- screen resolution: 1024 x 600
- weight: 570 g (excluding connectors and screws)

COMPLETE DEVICE

550-20102	Items: 1	Touchscreen

COMPLETE DEVICE

550-00501	Items: 1	PoE power supply

COMPLETE DEVICE

340-00021	Items: 1	DIN rail power supply, 24 Vdc - 25 W
340-00022	Items: 1	DIN rail power supply, 24 Vdc - 50 W
340-00023	Items: 1	DIN rail power supply, 24 Vdc - 100 W

External video unit

This ultra-flat external video unit for flush-mounting is finished with a black front plate made of anodised aluminium (3 mm thick). The device is equipped with a 130° HD colour camera and a Plexiglas name plate that can be engraved. The external video unit is supplied with a flush-mounting box. This unique lighting concept (patent pending) provides refined and homogeneous illumination of the engraved nameplate, guaranteeing good visibility in the dark. The touch button requires no maintenance and is extremely durable. Combined with the touchscreen as an internal video unit, access control can be integrated into a Niko Home Control installation via the external video unit. You can then use a smartphone or tablet as an additional external video unit if both the installation and the mobile device have an active Internet connection and the installation has been registered at mynikohomecontrol.niko.eu. Please note: we recommend providing at least one touchscreen in each installation on top of the smartphones and/or tablets because a wired device is always more reliable than a mobile one.

- power supply voltage: 48 Vdc ± 10%
- power consumption: 5 W
- ambient temperature: -30 - 60 °C
- dimensions flush-mounting box: 239 x 89 x 47 mm (HxWxD)
- dimensions external unit: 256 x 110 mm (HxW)
- HD camera resolution: 720 horizontal TV lines
- camera angle: 130°
- light sensitivity: 1 lux
- mounting: flush-mounting
- protection degree: IP53
- CE marked

COMPLETE DEVICE

550-22001	Items: 1	1 back-lit touch button
550-22002	Items: 1	2 back-lit touch buttons

COMPLETE DEVICE

550-21004	Items: 12	4 touch buttons (not illuminated)

COMPLETE DEVICE

550-00501	Items: 1	PoE power supply

ACCESSORIES

550-22091 Items: 1 Spare nameplate for external video unit with one touch button

550-22092 Items: 1 Spare nameplate for external video unit with two touch buttons

Indoor motion detector for Niko Home Control

This motion detector is for indoor use only. Niko Home Control supplies the motion detector with power. There is no need for an additional power supply. To be used as a motion detector or as a motion detector and photo cell combined.

- resting potential: 26 Vdc (SELV, safety extra-low voltage)
- detection angle: 180° horizontal, 60° vertical
- detection range: 8 m (horizontal)
- recommended installation height: 90 - 110 cm
- light sensitivity: 5 - 1,200 lux
- switch-off delay: 10 s
- manual mode option
- ambient temperature: -5 - 45 °C
- CE marked

BASE

550-20210 Items: 6 For claw fixing

FINISHING SET

100-55511	Items: 6	**101-55511**	Items: 6	**102-55511**	Items: 6
104-55511	Items: 6	**121-55511**	Items: 6	**122-55511**	Items: 6
123-55511	Items: 6	**124-55511**	Items: 6	**154-55511**	Items: 6
157-55511	Items: 6	**161-55511**	Items: 6	**200-55511**	Items: 6
220-55511	Items: 6	**221-55511**	Items: 6		

360° Mini detector for Niko Home Control

The mini detector detects movement and changes in light intensity. Using this information Niko Home Control functions can be activated or deactivated. The product is suitable for ceiling mounting in suspended ceilings, both indoors and outdoors.

- dimensions: 13.3 x 36 mm (HxW), 62.6 x 36 mm (HxW) (incl. invisible part)
- resting potential: 26 Vdc (SELV, safety extra-low voltage)
- consumption: 0.1 W / 5 mA (10 Niko Home Control points)
- detection angle: 360°
- detection range: circle, maximum 9.5 m at a height of 3 m (sensitivity set to high)
- the detection angle can be reduced by using the black and white shields supplied
- connection: cable 50 cm, 2 x 0.5 mm² (with cord end terminals of 8.8 mm long and a diameter of 1 mm)
- mounting height: 2 - 3 m
- drill diameter: 30 mm
- light sensitivity: 2 – 25,000 lux
- switch-off delay: 1 - 60 min
- protection degree: IP65
- ambient temperature: -20 °C - 50 °C
- CE marked

MINI DETECTOR

550-20220 Items: 1 Complete device

Outdoor motion detector for Niko Home Control (white)

This motion detector is suitable for use on driveways, terraces, in gardens or in garages. The detector is equipped with an integrated light sensor. The sensor can be rotated horizontally within a 25° angle to modify the direction of detection. If a portion of the detection area is to be excluded from monitoring, cover the sensor lens using the cover mask supplied. Niko Home Control supplies the motion detector with power. There is no need for an additional power supply.

- resting potential: 26 Vdc (SELV, safety extra-low voltage)
- detection angle: 180°
- detection range: semi-circle, up to 14 m max. (if mounted at a height of 2.5m)
- light sensitivity: 5 lux to infinity
- hysteresis on light sensitivity: + 10%
- switch-off delay: 8 s - 30 min
- mounting height: 2.5 m
- cable inlet: 2 x 12.5 mm
- protection degree: IP54
- ambient temperature: -20 - 45 °C
- CE marked
- in conformity with EN60669-2-1

COMPLETE DEVICE

550-20200 Items: 1 Complete device

ACCESSORIES

390-20050 Items: 1 Ceiling mounting bracket

Outdoor motion detector for Niko Home Control (black)

This motion detector is suitable for use on driveways, terraces, in gardens or in garages. The detector is equipped with an integrated light sensor. The sensor can be rotated horizontally within a 25° angle to modify the direction of detection. If a portion of the detection area is to be excluded from monitoring, cover the sensor lens using the cover mask supplied. Niko Home Control supplies the motion detector with power. There is no need for an additional power supply.

- resting potential: 26 Vdc (SELV, safety extra-low voltage)
- detection angle: 180°
- detection range: semi-circle, up to 11 m (if mounted at a height of 2.5 m)
- light sensitivity: 5 lux to infinity
- hysteresis on light sensitivity: + 10%
- switch-off delay: 8 s - 30 min
- mounting height: 2.5 m
- cable inlet: 2 x 12.5 mm
- protection degree: IP54
- ambient temperature: -20 - 45 °C
- CE marked
- in conformity with EN60669-2-1

COMPLETE DEVICE

550-20201 Items: 1 Complete device

ACCESSORIES

390-20150 Items: 10 Ceiling mounting bracket

Photo cell, IP54, adjustable light sensitivity

Photo cell for outdoor applications (IP54). To be used in combination with the Niko Home Control analogue sensor module (550-00230). The photo cell has a variable light sensitivity of 3 to 300 lux, 30 to 3 Klux, 300 to 30 Klux or 600 to 60 Klux.

- power consumption: 24 Vdc ± 10%
- output signal: 0 - 10 V
- light sensitivity: 3 - 300 lux, 30 - 3 Klux, 300 - 30 Klux or 600 - 60 Klux
- protection degree: IP54
- ambient temperature: -40 - 50 °C

COMPLETE DEVICE

350-10012 Items: 10 Complete device

Twilight switch, 24 V, one channel (4 A)

Twilight switch for outdoor wall-mounting (IP54). Suitable for switching outdoor lights. For use in combination with the digital potential-free sensor module (550-00210). Large sensor surface for accurate light measuring. In compliance with the European directives for EMC and safety EN60669-2-1.

- power supply voltage: 24 Vac/Vdc ± 10%
- relay contact: NO (max. 4 A)
- incandescent lamps: 40 W
- hysteresis on light sensitivity: + 50%
- switch-off delay: ± 1 min
- light sensitivity: 2 - 200 lux
- protection degree: IP54
- operating temperature: -50 - 50 °C
- dimensions: 102 x 73 x 39 mm (HxWxD)

COMPLETE DEVICE

350-10032 Items: 5 Complete device

Motion detector 90°, 24 Vdc, 0.5 - 22 m

Suited to motion detection at an angle of 90° and at a distance of between 0.5 m and 15 m. To be used in combination with a daylight control module (360-35010) for lighting control. The IP54-protective cap (390-20010) should be used for outdoor applications. This protective cap must be ordered separately.

- power supply voltage: 24 Vdc ± 10 %
- dimensions (HxWxD): 67 x 52 x 34 mm
- power consumption: < 5 mA
- relay contact: on/off (NPN transistor)
- wire input: 2 x 2 x 0.6 mm²
- detection angle: 90°
- detection range : maximum 22 m diameter from a height of 3 m
- protection degree: IP20
- mounting height: maximum 3 m
- ambient temperature: -20 - 50 °C
- mounting: surface-mounting

COMPLETE DEVICE

350-30010 Items: 1 Complete device

ACCESSORIES

390-20010 Items: 10 Protective cap IP54

390-20000 Items: 1 Vandal-proof protection cap, wall mounting

Motion detector 90°, 24 Vdc, 0.5 - 22 m, with potential-free contact

Motion detector 90°, 24 V, with potential-free contact for mounting on walls and ceilings. The detector is durable, functional and compact. The motion detector has a built-in walking test and adjustable sensitivity (5 levels) and can be combined with Niko Home Control. For use in combination with the digital potential-free sensor module (550-00210). For use in small offices, storage areas, corridors, conference rooms … The motion detector is suitable for the control of HVAC, ventilation, building management systems, Niko Home Control … The switch-off delay of the potential-free relay and the sensitivity of the detector can be set on the device. Also suitable for outdoor applications. In this case a protective cover (to be ordered separately) is used to make the motion detector splash-proof (protection degree IP54).

- power supply voltage: 24 Vdc ± 10 %
- dimensions (HxWxD): 67 x 52 x 34 mm
- relay contact: reed relay, NO (max. 48 V/0.2 A), potential-free
- minimum power consumption: 4 mA (when idle)
- maximum power consumption: 18 mA
- detection angle: 90°
- protection degree: IP20
- mounting height: 2 - 3 m
- detection range: max. 22 m
- switch-off delay: 2 sec, 30 sec or 30 min
- ambient temperature: -20 - 50 °C
- mounting: surface-mounting

COMPLETE DEVICE

350-41279 Items: 1 Complete device

ACCESSORIES

390-20010 Items: 10 Protective cap IP54

390-20000 Items: 1 Vandal-proof protection cap, wall mounting

Motion detector 360°, 24 V, with potential-free contact, for surface-mounting

The motion detector has a limited diameter (80 mm) and thickness (3 cm) and an adjustable sensitivity (4 levels). For use in small offices, storage areas, corridors, conference rooms, … The detector is suitable for the control of HVAC, ventilation, building management systems, Niko Home Control ... For use in combination with the digital potential-free sensor module (550-00210). It is possible to set both the switch-off delay of the potential-free relay and the sensitivity of the detector on the device using the DIP switches.

- power supply voltage: 24 Vac/Vdc ± 10 %
- relay contact: reed relay, NO (max. 48 V/0.2 A), potential-free
- minimum power consumption: 4 mA (when idle at 24 Vdc)
- maximum power consumption: 20 mA (at 24 Vac)
- detection angle: 360°
- detection range : maximum 12 m diameter
- switch-off delay: 30 s - 60 min
- protection degree: IP20
- mounting height: 2.5 - 4 m
- ambient temperature: -5 - 50 °C
- mounting: surface-mounting

COMPLETE DEVICE

350-41549 Items: 1 Complete device

Connected controller

The connected controller is the central module of every Niko Home Control installation. It covers all basic functions on which a Niko Home Control installation is built. The basic functions include:

- The intelligence directing the logic to the installation. Through the programming software, the logic is saved locally on the controller.
- The power supply module providing an input voltage of 26 V to the bus, the cabinet modules and the controls. Depending on the size of the installation, separate power supply modules can be added.
- The connection to Niko Home Control IP devices such as touchscreens and external video units. A built-in router allows the user to connect up to 3 devices directly to the controller. With an extra switch, this number can be increased.
- The connection to the internet. This enables the user to control the installation both indoors and outdoors (via mobile networks such as 3G, 4G, GPRS or WiFi hotspot) using mobile devices (smartphones and tablets with iOS or Android).

The module has a TEST button to verify the proper functioning and status of all other modules. The SERVICE button allows you to perform waiting Niko upgrades.

Each installation must consist of one connected controller.

After registration on https://mynikohomecontrol.niko.eu your installation is "connected", enabling control through the app via your smartphone and tablet and you can enjoy the Niko services for upgrade or diagnosis of the installation.

- equipped with a permanent memory for storage of the programming
- the saved programming can be read at any time
- dimensions: DIN 6U
- sliding contact to connect the module to the following module on the DIN rail
- input voltage: 230 Vac ± 10 %, 50 Hz
- output voltage: 26 Vdc, 400 mA (SELV, safety extra-low voltage)
- 1 RJ45 port for connection to the home network and/or internet
- 3 RJ45 ports for the Niko Home Control network (connection IP devices such as touchscreens, external video units or Ethernet switch which groups them)
- 4 plug-in terminals at the top to connect the module with the rail coupler on the next DIN rail
- 4 plug-in terminals to provide the module with 230 Vac power supply voltage; daisy-chained if necessary
- CE marked
- ambient temperature: 0 – 45 °C
- protected against short-circuit, overvoltage and overheating

COMPLETE DEVICE

550-00003 Items: 1

Power supply

The power supply, in combination with the connected controller, provides an extra input voltage of 26 V to the bus, modules and controls for installations larger than the power of the built-in power supply in the connected controller. Up to 2 extra power supplies can be used in installations with a connected controller. The MASTER button is not used, as the power supply in the connected controller is always the master in an installation. Please refer to the installation manual for more information concerning the required number of power supply modules.

- available power: 10 W
- input voltage: 230 Vac ± 10%, 50 Hz
- output voltage: 26 Vdc, 400 mA (SELV, safety extra-low voltage)
- dimensions: DIN 4U
- sliding contact to connect the module to the following module on the DIN rail
- 4 connection terminals at the top to connect the power supply with the rail coupler on the next DIN rail
- CE marked
- ambient temperature: 0 - 45 °C
- short circuit, over voltage, faulty connection and overheating protection

COMPLETE DEVICE

550-00010 Items: 6 Power supply

Rail coupler

This module is always mounted first on the left at the start of a new row of DIN rail modules on which no power supply is yet present. Interconnect the power supply and bus through the contacts at the top and bottom.

- dimensions: DIN 2U
- sliding contact to connect the module to the following module on the DIN rail
- 2 x 4 screw terminals for 3 x 1.5 mm² or 2 x 2.5 mm² or 1 x 4 mm²
- CE marked
- ambient temperature: 0 - 45 °C

COMPLETE DEVICE

550-00020 Items: 10 Rail coupler

Switching module (3x)

The 3-fold switching module is suitable for switching up to three different switching circuits, such as light points or socket outlets. The module allows you to interconnect 1 zero conductor to maintain neat cabling in the box. The module is provided with three indication LEDs and one status LED. Bistable relays ensure low energy consumption.

- only one phase per switching module should be connected
- maximum load: 230 V – 16 A per switching contact
- total maximum load of the module: 230 V – 40 A
- 3 independent switching circuits possible on the same phase
- dimensions: DIN 2U
- sliding contact to connect the module to the following module on the DIN rail
- 2 x 4 screw terminals for 3 x 1.5 mm² or 2 x 2.5 mm² or 1 x 4 mm²
- CE marked
- ambient temperature: 0 - 45 °C

COMPLETE DEVICE

550-00103 Items: 10 Switching module (3x)

Switching module (6x)

The 6-fold switching module is suitable for switching up to six different switching circuits, such as light points or socket outlets. The module allows you to interconnect 2 zero conductors to maintain neat cabling in the box. The module is provided with six indication LEDs and one status LED. Bistable relays ensure low energy consumption.

- only one phase per switching module should be connected
- maximum load: 230 V – 16 A per switching contact
- total maximum load of the module: 230 V – 32 A
- 2 groups with 3 switching contacts each
- dimensions: DIN 4U
- sliding contact to connect the module to the following module on the DIN rail
- 2 x 8 screw terminals for 3 x 1.5 mm² or 2 x 2.5 mm² or 1 x 4 mm²
- CE marked
- ambient temperature: 0 - 45 °C

COMPLETE DEVICE

550-00106 Items: 6 Switching module (6x)

Universal dim module (2 x 400 W)

The universal dimming module is a DIN module with two channels for dimming light circuits. This module is suitable for incandescent lamps, 230V halogen lamps, 12V halogen lamps with a ferromagnetic or an electronic transformer, dimmable LEDs (max 10) and dimmable energy-saving lamps CFLi (max 10). The minimum light intensity and the type of lighting you wish to dim are manually adjustable. The modules can be placed alongside each another without extra power reduction.

- input voltage: 230 Vac ± 10%, 50 Hz
- ambient temperature: 0 - 45 °C
- for use in locations with non-condensing humidity (30% - 70%)
- dimming capacity per channel: 5 - 400 VA (at 45 °C) or 5 - 500 VA (at 35 °C)
- minimum light intensity and phase control or reverse phase control can be adjusted manually
- a maximum of 10 CFLi or dimmable LED lamps may be connected
- 2 x 4 screw terminals for 3 x 1.5 mm² or 2 x 2.5 mm² or 1 x 4 mm²
- sliding contact to connect the module to the following module on the DIN rail
- in conformity with EN60669-2-1
- short-circuit and overheating protections
- CE marked
- dimensions: DIN 4U

COMPLETE DEVICE

550-00340 Items: 6 Universal dim module (2x400 W)

Motor module

The motor module can operate up to three applications that are motor-controlled, such as roller blinds, sun blinds or venetian blinds. The module allows you to interconnect 2 zero conductors to maintain neat cabling in the box. The module is provided with six indication LEDs and one status LED. Bistable relays ensure low energy consumption. The operating time can be set with the programming software.

- only 1 phase per motor module should be connected
- switching delay: 0.5 s
- maximum number of motors permitted: 3
- maximum load: 230 V – 6 A per switching contact
- dimensions: DIN 4U
- sliding contact to connect the module to the following module on the DIN rail
- 2 x 8 screw terminals for 3 x 1.5 mm^2 or 2 x 2.5 mm^2 or 1 x 4 mm^2
- CE marked
- ambient temperature: 0 - 45 °C

COMPLETE DEVICE

550-00130 Items: 6 Motor module

Electricity measuring module (1 channel)

This module allows the resident to measure the electricity consumption or production on one switching circuit or phase. The module is suitable for measuring the total electricity consumption or electricity production of homes connected to a single-phase network. Attach the accompanying current clamp by clipping it around the conductor of the circuit or phase to be measured (measuring current) and use the connection terminals to establish a connection with the circuit or phase to be measured (measuring voltage). By measuring both electrical current and voltage, the installation can accurately assess how much electricity is consumed or produced in the home. The consumption or production measured appears on the eco-display. Using the touchscreen or control app, residents can easily monitor their consumption or production and detect deviations. The module is provided with one indication LED and one status LED.

- measuring range with current clamp supplied: 5 - 14490 W, 22 mA – 63 A
- measuring range with current clamp 550-00809: 90 - 27600 W, 400 mA – 120 A
- input voltage: 230 Vac
- 1 current clamp (included)
- accuracy: IEC62053-21 class 1 (R), class 2 (L)
- single-phase connection: 230 Vac, 50 Hz
- maximum cable thickness for the included current clamp: 1 x 10 mm^2 or 6 x 2.5 mm^2 or 9 x 1.5 mm^2
- maximum cable thickness for current clamp 550-00809: 4 x 10 mm^2 or 12 x 2.5 mm^2 or 20 x 1.5 mm^2
- length of the connector cable at the current clamp: 100 cm
- not suited to measuring direct current components
- measuring data only for information purposes, not valid for invoicing
- 4 screw terminals to measure the voltage of the connected switching circuit
- 2 screw terminals to connect the current clamp supplied
- sliding contact to connect the module to the following module on the DIN rail
- dimensions: DIN 2U
- CE marked
- ambient temperature: 0 - 45 °C

COMPLETE DEVICE

550-00801 Items: 6 electricity measuring module (1 channel), including current clamp of 63 A

ACCESSORIES

550-00809 Items: 1 Current clamp 120 A

Electricity measuring module (3 channels)

This module is suitable to measure the three-phase total or partial consumption (or the total production of photovoltaic solar panels) in an installation. Three-phase measurements are possible in homes connected to a three-phase supply network 3N 400 Vac but not for installations in a three-phase supply network 3 x 230 Vac.
The module is also suitable to carry out 3 separate single-phase measurements of a part of the installation, such as the production or the consumption of several circuits (such as the upper floor of a dwelling) or a specific device (heavy consumer). Measuring 3 separate single-phase circuits can be carried out in single-phase installations 230 V, installations 3N 400 Vac and installations 3x 230 Vac.
Attach the three accompanying current clamps by clipping them around the conductors of the circuits or phases to be measured (measuring current) and use the connection terminals to establish a connection with the circuits or phases to be measured (measuring voltage). By measuring both electrical current and voltage, the installation can accurately assess how much electricity is consumed or produced in the home. The consumption or production measured appears on the eco-display. Using the touchscreen or control app, residents can easily monitor their consumption or production and detect deviations. The module is provided with three indication LEDs and one status LED.

- measuring range with current clamps supplied: 5 - 14490 W, 22 mA – 63 A
- measuring range with current clamp 550-00809: 90 - 27600 W, 400 mA – 120 A
- maximum measuring range for the entire measuring module: 32768 W
- input voltage: 230 Vac
- 3 current clamps (included)
- accuracy: IEC62053-21 class 1 (R), class 2 (L)
- connection:
  - three-phase: 3N 400 Vac, 50 Hz
  - single-phase: three switching circuits of 230 Vac, 50 Hz
- maximum cable thickness for the included current clamps: 1 x 10 mm^2 or 6 x 2.5 mm^2 or 9 x 1.5 mm^2
- maximum cable thickness for current clamp 550-00809: 4 x 10 mm^2 or 12 x 2.5 mm^2 or 20 x 1.5 mm^2
- length of the connector cable at each current clamp: 100 cm
- not suited to measuring direct current components
- measuring data only for information purposes, not valid for invoicing
- 3 x 2 screw terminals to measure the voltage of the connected switching circuits
- 3 x 2 screw terminals to connect the current clamps supplied
- sliding contact to connect the module to the following module on the DIN rail
- dimensions: DIN 4U
- CE marked
- ambient temperature: 0 - 45 °C

COMPLETE DEVICE

550-00803 Items: 10 Electricity measuring module (3 channels), including current clamp of 63 A

ACCESSORIES

550-00809 Items: 1 Current clamp 120 A

Pulse counter

The pulse counter allows you to monitor gas, water and electricity consumption as well as electricity production. The module has three pulse inputs, to allow a connection with up to 3 meters. The module is connected to the pulse output of a gas, water or electricity meter. Per installation only one gas meter and one water meter may be connected. The scale factor of the pulses (e.g. 1 pulse = 10 litres) and the meter type (gas, water or electricity) can be selected via the programming software. The consumption or production measured appears on the eco-display. Using the touchscreen or control app, residents can easily monitor their consumption or production and detect deviations. The module is provided with one indication LED and one status LED.
For a newly constructed dwelling, you can ask the client (building supervisor or architect) to request a gas or water meter with pulse output from the energy supplier.

- maximum pulse frequency per input: 10 Hz
- minimum pulse duration: 30 ms
- only for meters with a pulse output isolated from the mains in accordance with SELV requirements (safety extra-low voltage)
- measuring data only for information purposes, not valid for invoicing
- 4 screw terminals for 3 x 1.5 mm^2 or 2 x 2.5 mm^2 or 1 x 4 mm^2
- sliding contact to connect the module to the following module on the DIN rail
- dimensions: DIN 2U
- CE marked
- ambient temperature: 0 - 45 °C

COMPLETE DEVICE

550-00250 Items: 10 Pulse counter

Heating or cooling module

The heating or cooling module controls the heating or cooling in maximum four zones or rooms. Each zone or room should be equipped with a Niko Home Control thermostat. The module has four outputs to control zone valves (e.g. zone valves at 230 Vac or 24 Vdc) or circulation pumps in four zones or rooms and one output to set the heating or cooling system to day or night mode (depending on the heating or cooling request of one of the zones or rooms). Most boilers or cooling units are fitted with an input contact (e.g. a telephone or boiler contact) for this purpose. The module is provided with five indication LEDs and one status LED. Bistable relays ensure low energy consumption. Contact the HVAC installer to have the heating or cooling system fitted with zone valves (e.g. zone valves at 230 Vac or 24 Vdc on the heating collector or radiator or tunable circulation pumps) and to verify the contact of the heating or cooling unit to which the system should be connected.

- maximum current per module: 16 A
- screw terminals for controlling 4 zone valves or circulation pumps at 230 Vac or 24 Vdc (do not mix per module)
- 2 x 7 screw terminals for 3 x 1.5 mm^2 or 2 x 2.5 mm^2 or 1 x 4 mm^2
- dimensions: DIN 4U
- sliding contact to connect the module to the following module on the DIN rail
- CE marked
- ambient temperature: 0 - 45 °C

COMPLETE DEVICE

550-00150 Items: 6 Heating or cooling module

Ventilation module

The ventilation module controls the central ventilation system via the Niko Home Control installation. The module is suitable for ventilation type C (mechanical extract ventilation) and D (mechanical supply and extract with heat recovery). Connect the ventilation system to the ventilation module as opposed to the three or four-way switch supplied with the system. Use the programming software to select when and for how long the ventilation system should remain activated for each setting, i.e. 'low' (eco), 'normal' and 'high'. The resident can considerably save energy while maintaining maximum air quality in the home by linking the ventilation control function, for example, to the eco-function (all off) or calendar-based functions. The module is provided with three indication LEDs and one status LED. Bistable relays ensure low energy consumption.

- suitable for two-wire or three-wire control of a ventilation unit
- only one phase per ventilation module should be connected
- maximum load: 230 Vac – 16 A per channel
- screw terminals to control 3 settings: low (eco), normal or high
- 2 x 4 screw terminals for 3 x 1.5 mm^2 or 2 x 2.5 mm^2 or 1 x 4 mm^2
- dimensions: DIN 2U
- sliding contact to connect the module to the following module on the DIN rail
- CE marked
- ambient temperature: 0 - 45 °C

COMPLETE DEVICE

550-00140 Items: 10 Ventilation module

Analogue control module 0-10 V

Three high-power dimmers are connected to the Niko Home Control installation using the analogue control module 0-10V. Useful Niko reference codes: 05-711, 05-715, 65-410, 65-412, 65-416 and 330-00701.

- 3 outputs: 0 - 10 V (FELV, functional extra-low voltage), voltage-controlled (U)
- maximum distance between dimmers and module: 50 m
- maximum load: 10 mA per channel
- short circuit protection per channel
- 4 screw terminals for 3 x 1.5 mm^2 or 2 x 2.5 mm^2 or 1 x 4 mm^2
- dimensions: DIN 2U
- sliding contact to connect the module to the following module on the DIN rail
- ambient temperature: 0 - 45 °C
- CE marked

COMPLETE DEVICE

550-00240 Items: 10 Analogue control module 0-10 V

Analogue control module 1-10 V

Three dimmers and/or switching devices are connected to the Niko Home Control installation using the analogue control module 1-10 V:
- dimmers with an analogue input 1-10 V for dimming monochrome LEDs.
- electronic control gear for fluorescent lights.
- high power dimmers with an analogue input 1-10 V.

Useful Niko reference codes: 05-715, 65-410, 65-412, 65-416, 340-00028, 340-00029 and 330-00701.

- 3 outputs: 1 - 10 V (FELV, functional extra-low voltage), current-controlled (I)
- option of connecting 3 individual phases
- maximum distance between dimmers and module: 50 m
- maximum load: 20 mA per channel, protected from 50 mA per channel and maximum 11 V
- galvanic isolation when connecting the power circuit (6 A per channel)
- 2 x 6 screw terminals for 3 x 1.5 mm² or 2 x 2.5 mm² or 1 x 4 mm²
- dimensions: DIN 4U
- sliding contact to connect the module to the following module on the DIN rail
- ambient temperature: 0 - 45 °C
- CE marked

COMPLETE DEVICE

550-00241 Items: 6 Analogue control module 1-10 V

Digital potential-free sensor module

The digital potential-free sensor module allows you to connect up to three sensors with a N.O. contact or NPN transistor output to the Niko Home Control installation. The sensors must be suitable for use in applications with a safety extra-low voltage (SELV). Typical applications are twilight switches, smoke detectors, motion detectors, door communication systems or contacts used in locks, telephone interfaces and alarm systems.

- maximum distance between sensors and sensor module: 50 m
- 4 screw terminals for 3 x 1.5 mm² or 2 x 2.5 mm² or 1 x 4 mm²
- dimensions: DIN 2U
- sliding contact to connect the module to the following module on the DIN rail
- ambient temperature: 0 - 45 °C
- CE marked

COMPLETE DEVICE

550-00210 Items: 10 Digital potential-free sensor module

Analogue sensor module

Three external analogue sensors with output 0-10 V are connected to the Niko Home Control installation using the analogue sensor module. The sensors must be suitable for use in applications with a safety extra-low voltage (SELV). This type of sensor is used for measuring sunlight, wind, rain, CO 2 , humidity or temperature. In function of the values measured, applications such as sun blinds, roll-down shutters and lights can be operated automatically.

- maximum of 10 analogue sensor modules per installation
- maximum distance between sensors and sensor module: 100 m
- 4 screw terminals for 3 x 1.5 mm² or 2 x 2.5 mm² or 1 x 4 mm²
- dimensions: DIN 2U
- sliding contact to connect the module to the following module on the DIN rail
- ambient temperature: 0 - 45 °C
- CE marked

COMPLETE DEVICE

550-00230 Items: 10 Analogue sensor module

Niko Home Control RF interface Easywave

The RF Interface Easywave makes it possible to use Niko wireless Easywave controls (with the exception of the remote control 05-312) in the Niko Home Control installation. This module receives Easywave radio signals, which allows the use of controls:
- where this would not normally be possible, e.g. on glass or concrete surfaces.
- for the renovation of heritage-listed buildings.
- for expansions of existing installations where drilling or channelling work is not permitted.
- in office areas with movable partition walls.
- when complex cabling is to be avoided.

- one RF interface Easywave per installation
- to be used with included external antenna
- place antenna on a metallic surface of minimum 15 x 15 cm
- reception range: ± 30 m indoors, 100 m in open spaces
- dimensions: DIN 2U
- sliding contact to connect the module to the following module on the DIN rail
- ambient temperature: 0 - 45 °C
- CE marked

COMPLETE DEVICE

550-00610 Items: 6 RF interface Easywave

Nikobus interface

This module is only suited for use in a Niko Home Control I installation.

The Nikobus interface allows you to expand a Nikobus installation by adding several functions of the Niko Home Control installation. Note that programming via PC must be enabled within the Nikobus installation, i.e. at least PC Link, PC Logic or a feedback module is required.

- connection of Nikobus to two screw terminals (B1 and B2)
- dimensions: DIN 2U
- sliding contact to connect the module to the following module on the DIN rail
- 2 screw terminals for 3 x 1.5 mm^2 or 2 x 2.5 mm^2 or 1 x 4 mm^2
- CE marked
- in conformity with EN60669-2-1
- ambient temperature: 0 - 45 °C
- short-circuit and overheating protections

COMPLETE DEVICE

550-00505 Items: 10 Nikobus interface

Programming software

The installation can be programmed with the programming software. The new software is even more user-friendly, intuitive and structured very visually. The software can be downloaded for free from www.niko.eu. The software is available for PC and Mac.

PROGRAMMING SOFTWARE NIKO HOME CONTROL II

550-99102	Items: 1	Programming software for Windows
550-99202	Items: 1	Programming software for Mac

Control app for smartphone or tablet

With this app you can use your smartphone or tablet (available from 2018) indoors and outdoors as the central control of your Niko Home Control II installation. Install this app on an iPhone, iPad or Android smartphone or tablet. Your connected controller and mobile device must both be connected to the internet (via WiFi, 3G, 4G, GPRS) to use the app. You can control all the functionality of your Niko Home Control installation through a modern and user-friendly interface. You can use the app for switching lighting and socket outlets, dimming lighting, controlling roller shutters and sun blinds as well as for activating atmospheres and switching your heating and ventilation. The app also informs you about your home's electricity, gas and water consumption. This app also allows you to answer calls from your external video unit when you're not home. You can see the visitor, talk to them and open your door remotely if necessary. In installations with access control, we recommend providing at least one touchscreen on top of the smartphones and/or tablets because a wired device is always more reliable than a mobile one. The app can be downloaded for free in the app store.

NIKO HOME CONTROL II CONTROL APP

550-92102	Items: 1	Niko Home Control II control app for iOS
550-92202	Items: 1	Niko Home Control II control app for Android

The Niko Home Control I programming software and apps are still available for existing installations.
See www.niko.eu

Basic installation

At the back door, in the entrance hall and in the garage switches are installed for the all-off button and the presence simulation. A panic button and an all-off button are installed in the bedroom to switch off all lighting downstairs. In the utility room you can automatically switch off the light using the timer function. With their smartphone or tablet, they can control their installation inside the home and anywhere in the world.

Description	Ref.	Apart.	Residence	Large residence
Connected controller	550-00003	1	1	1
Rail coupler	550-00020	1	1	1
Switching module for 3 different circuits	550-00103	1	1	
Switching module for 6 different circuits	550-00106	1	2	4
Double vertical wall-mounted printed circuit board for use in combination with connection unit, centre-to-centre distance 60 mm	550-14021	1	2	2
Connection unit for multiple wall-mounted printed circuit board	550-14090	1	2	2
Single wall-mounted printed circuit board with connector	550-14110	8	15	24
Single push button	xxx-51001	7	8	8
Double push button	xxx-51002		8	14
Four-fold push button	xxx-51004	1	1	3
Six-fold push button	xxx-51006			1
Single push button with LED	xxx-52001	2	1	
Double push button with LED	xxx-52002	1	1	2
Single flush surround plate	xxx-76100	8	15	24
Two-fold flush surround plate, centre-to-centre distance 60 mm	xxx-76200	1	2	2

Apartment: 8 light circuits + 1 circuit with switched socket outlets
Residence: 13 light circuits + 2 circuits with switched socket outlets
Large residence: 21 light circuits + 3 circuits with switched socket outlets

More comfort

Via mood control in the living room your clients can choose the desired light level for all their activities with one push of the button. In the entrance hall, landing, storage room, toilet, basement, garage, walk-in closet and along the facade the motion detectors replace the regular switches. Do your clients have a patio? Then install a control switch with built-in LED for their outdoor lighting. That way they can see inside if the outdoor lighting was left on.

Description	Ref.	Apart.	Residence	Large residence
Connected controller	550-00003	1	1	1
Rail coupler	550-00020	1	1	2
Switching module for 3 different circuits	550-00103			1
Switching module for 6 different circuits	550-00106	1	2	3
Universal dim module 2 x 400W	550-00340	2	2	3
Mood control	550-13040	1	1	1
Double vertical wall-mounted printed circuit board for use in combination with connection unit, centre-to-centre distance 60 mm	550-14021		1	2
Connection unit for multiple wall-mounted printed circuit board	550-14090		1	1
Single wall-mounted printed circuit board with connector	550-14110	11	15	27
Outdoor motion detector white	550-20200		1	2
Indoor motion detector	550-20210	1	1	2
Mini detector	550-20220	2	3	5
Single push button	xxx-51001	3	5	8
Double push button	xxx-51002	2	4	7
Four-fold push button	xxx-51004	1	1	5
Six-fold push button	xxx-51006			1
Single push button with LED	xxx-52001	1	1	1
Double push button with LED	xxx-52002	1	1	2
Single dimming control	xxx-51043	3	3	5
Double dimming control	xxx-51046	1	2	2
Finishing set for indoor motion detector	xxx-55511	1	1	2
Single flush surround plate	xxx-76100	10	17	30
Two-fold flush surround plate, centre-to-centre distance 60 mm	xxx-76200		1	2

Apartment: 5 light circuits + 4 dimmable light circuits + 1 circuit with switched socket outlets
Residence: 10 light circuits + 4 dimmable light circuits + 2 circuits with switched socket outlets
Large residence: 18 light circuits + 6 dimmable light circuits + 3 circuits with switched socket outlets

Living safely

Has the installation detected that something is not right? In that case, your clients will receive a warning message on their smartphone. Motion detectors in the living room and entrance hall and along the exterior facade will switch on the lighting upon detecting movement. This will scare off unwanted visitors during the night. Detectors in the toilet and the storage areas automatically switch on the light when someone is present in the room. The roll-down shutters are also controlled automatically. As they are connected to the smoke detectors, they will automatically open when there is a fire alarm, providing the residents with an additional escape route. And your customers can decide exactly who they let into the house with an external video unit at the front door and a touchscreen in the living room.

Description	Ref.	Apart.	Residence	Large residence
Connected controller	550-00003	1	1	1
Rail coupler	550-00020	1	1	2
Switching module for 3 different circuits	550-00103	1	1	
Switching module for 6 different circuits	550-00106	1	2	4
Motor module	550-00130	1	1	2
Digital potential-free sensor module	550-00210	1	1	1
Power supply for touchscreen	550-00501		1	2
Double vertical wall-mounted printed circuit board for use in combination with connection unit, centre-to-centre distance 60 mm	550-14021	3	3	4
Connection unit for multiple wall-mounted printed circuit board	550-14090	3	3	4
Single wall-mounted printed circuit board with connector	550-14110	4	10	18
Touchscreen	550-20102			1
Outdoor motion detector white	550-20200		1	3
Indoor motion detector	550-20210	1	1	2
Mini detector	550-20220	3	3	4
External video unit with one illuminated touch button	550-22001		1	1
Single push button	xxx-51001	3	5	8
Double push button	xxx-51002	2	5	9
Four-fold push button	xxx-51004	1	1	2
Six-fold push button	xxx-51006			1
Single motor control	xxx-51033	3	1	1
Double motor control	xxx-51036		1	2
Single push button with LED	xxx-52001	1	3	3
Finishing set for indoor motion detector	xxx-55511	1	1	2
Single flush surround plate	xxx-76100	5	11	20
Two-fold flush surround plate, centre-to-centre distance 60 mm	xxx-76200	3	3	4

Apartment: 8 light circuits + 1 circuit with switched socket outlets
Residence: 13 light circuits + 2 circuits with switched socket outlets
Large residence: 21 light circuits + 3 circuits with switched socket outlets

Smart heating, smart ventilation

On top of the basic installation, a switched socket outlet is installed in the living room, kitchen, and office. Your clients can switch it off, for example to minimise standby consumption by switching off the TV, DVD player and decoder during the night. Zone heating in the living spaces and bathroom, as well as smart ventilation based on presence and absence reduces your energy consumption. Both are linked to the automatic roll-down shutters. Thanks to the electricity, water and gas readings, clients can see their energy consumption on the eco-display and on their smartphone or tablet.

Description	Ref.	Apart.	Residence	Large residence
Connected controller	550-00003	1	1	1
Rail coupler	550-00020	1	2	2
Switching module for 3 different circuits	550-00103			1
Switching module for 6 different circuits	550-00106	2	3	4
Motor module	550-00130	1	2	3
Ventilation module	550-00140	1	1	1
Heating or cooling module	550-00150	1	1	1
Digital potential-free sensor module	550-00210	1	1	1
Pulse counter	550-00250		1	1
Module for measuring electricity in homes connected to a single-phase network	550-00801		1	
Electricity measuring module (3 channels)	550-00803			1
Thermostat	550-13050	2	2	3
Eco-display	550-13080		1	1
Double vertical wall-mounted printed circuit board for use in combination with connection unit, centre-to-centre distance 60 mm	550-14021	4	5	10
Connection unit for multiple wall-mounted printed circuit board	550-14090	4	5	10
Single wall-mounted printed circuit board with connector	550-14110	7	13	16
Single push button	xxx-51001	7	8	8
Double push button	xxx-51002	2	7	14
Four-fold push button	xxx-51004	1	1	3
Six-fold push button	xxx-51006			1
Single motor control	xxx-51033	3	1	5
Double motor control	xxx-51036		2	2
Single push button with LED	xxx-52001		1	
Double push button with LED	xxx-52002	1	2	2
Ventilation control with LED	xxx-52054	1	1	1
Single flush surround plate	xxx-76100	9	16	20
Double flush surround plate, centre-to-centre distance 60 mm	xxx-76200	4	5	10

Apartment: 8 light circuits + 1 circuit with switched socket outlets
Residence: 13 light circuits + 2 circuits with switched socket outlets
Large residence: 21 light circuits + 3 circuits met switched socket outlets

Niko designs electr(on)ic solutions to enhance buildings to better suit the needs of the people who live and work in them. By using less energy, by improving light comfort and safety and by making sure all applications work together seamlessly. Buildings with Niko are more efficient, are controllable from a distance and interact within bigger ecosystems. Niko is a Belgian family business from Sint-Niklaas with 750 employees and 10 European branches.

At Niko we ask ourselves just one question every day: “How can we enhance buildings to better suit your needs?”

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