

Niko Home Control The new electrical installation



PROFESSIONAL



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Introduction The new electrical installation

Live more comfortably and safer, while 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 the home (or anywhere in the world). All in a sleek and timeless design.



Time for a new electrical installation

Online search engines replaced encyclopedias. Mobile phones and smartphones ousted the traditional phone. And iPods and MP3 music players easily toppled the walkman from first place. 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.





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. Choosing Niko Home Control means you're choosing effortless ease of use. 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.

Get to know the Niko Home Control **connected controller**. One basic module replacing the current controller, power supply, IP interface and gateway. Four modules in one. It makes the installation of Niko Home Control faster, easier and more efficient. Read all about it on page 11.

Niko Home Control is quick and easy to install and can be perfectly adapted to the size of the home. Its **programming software** is very intuitive and includes many pre-programmed logical functions. In this way, each small issue can be detected and resolved immediately. Niko Home Control offers you great added value without any extra workload or difficulties, while 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, smartphone 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.
- Faster installation
 - The 4 basic components of Niko Home Control are now combined in 1 module. This drastically reduces the number of installation steps.
- Easier connection
 - The connected controller allows you to save space in the electrical cabinet and to reduce the installation time considerably.
 - 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: now standard*

- Already over 80 % of end users choose to control their installation with their smartphone.
 With the connected controller it comes standard in the basic installation. Inside and outside the home.
- 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.
- Light version without IP module
 - The connected controller also comes in a light version, without control via touchscreen, tablet or smartphone.
- 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 resident makes use of the user software to fine-tune the dimming and roller blind level for a certain scene, the name of locations, actions on the touchscreen and time automations.

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 heir home** via a touchscreen, their tablet or smartphone. With the connected controller that is now standard anywhere in the world.





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 with the user software they can change scenes, names and time automations themselves.

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.



More comfort

Niko Home Control is controlled via a central touchscreen on the wall, but also via smartphone or tablet. With dimmers, motion detectors and mood control, your clients choose complete ease of use. Thanks to the smartphone and tablet, they have complete control over the residence at all times and anywhere in the world. 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.



Secure living

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.



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. Via the touchscreen, their tablet or smartphone or a separate eco-display, the energy consumption and the energy production of their solar panels are monitored.



Example installation with Niko Home Control

				A CONTRACTOR
Functionalities	Basic installation	More comfort	Secure living	Smart heating, smart ventilation
All-off button	•	٠	•	•
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		•	•	•
Centrally modify system settings		•	•	•
Central control, anywhere in the world		•	•	•
Central control by touchscreen		•	•	
Dimming lights		•		
Create and modify 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 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 with burglar-proof access control			•	
All-off button with eco-mode (at front door/in bedroom)				•
All-off button for the upper floor				•
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				•
, 0 1				

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 remote control via smartphone and tablet is enabled, and you can enjoy the Niko services for **upgrade 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.

There is also a **light version without IP functionalities** of the connected controller. Installations equipped with a light version, cannot be controlled via touchscreen, tablet or smartphone and cannot be equipped with an external video unit. With this entry-level model, the user can minimise the extra cost of a Niko Home Control installation compared to a traditional installation, but still enjoy a flexible installation with clear added value.

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 bus 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 mm²), e.g. SVV, JYSTY ▶ 250 m
- diameter: 0.6 mm (section: 0.25 mm²), e.g. TPVF ▶ 150 m
- diameter: 0.5 mm (section: 0.20 mm²), 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.

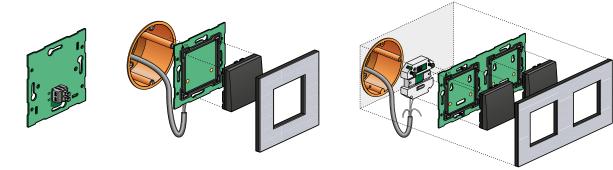
Only need one wall-mounted printed circuit board?

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 of 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.
- 223 1 12
- 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

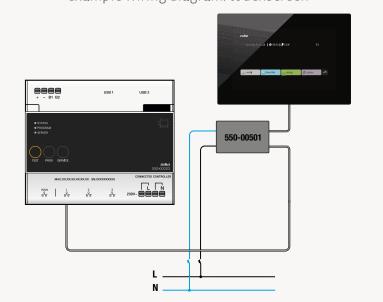


Touchscreen

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 shutter blinds ...

The touchscreen also displays details about electricity, gas and water consumption at any time. In addition, the touchscreen 2 serves as an internal video unit in combination with the Niko Home Control external video unit.

To connect the touchscreen, an extra cabinet module is not necessary (anymore). The connected controller takes care of everything. Plus, 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.



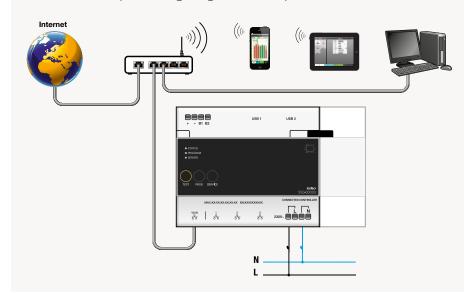
example wiring diagram: touchscreen



Smartphone and tablet

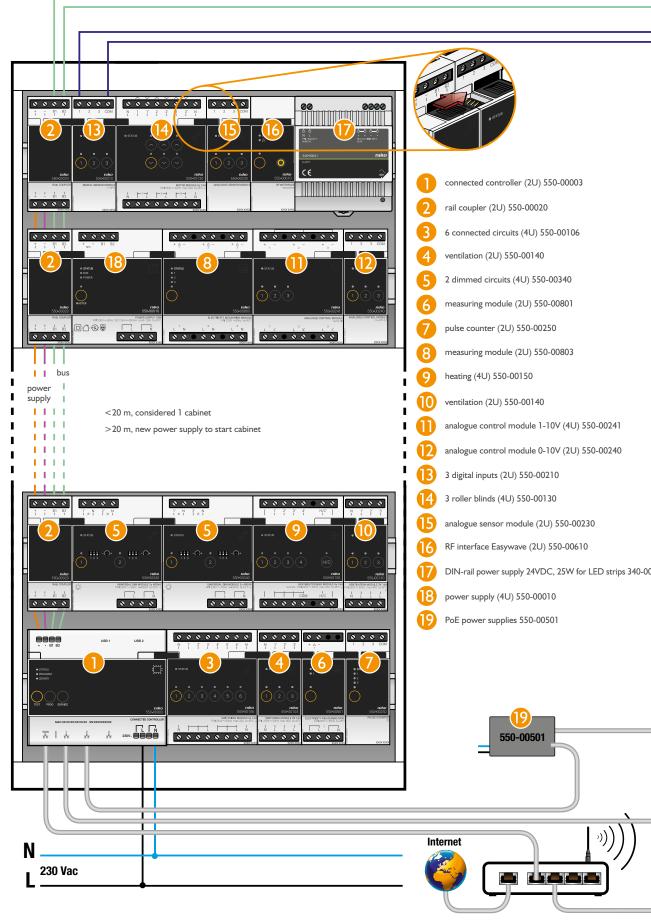
Smartphone and tablet controlled operation^{*} offers user-friendliness similar to the Niko Home Control touchscreen, and it controls the same functions. The Niko Home Control app is available for smartphones and tablets with iOS (iPhone and iPad) or Android operating system.

The connected controller provides all basic functions to remotely control the installation both inside and outside of the home. All the resident has to do to enable remote control of the installation, is register on https://mynikohomecontrol.niko.eu.



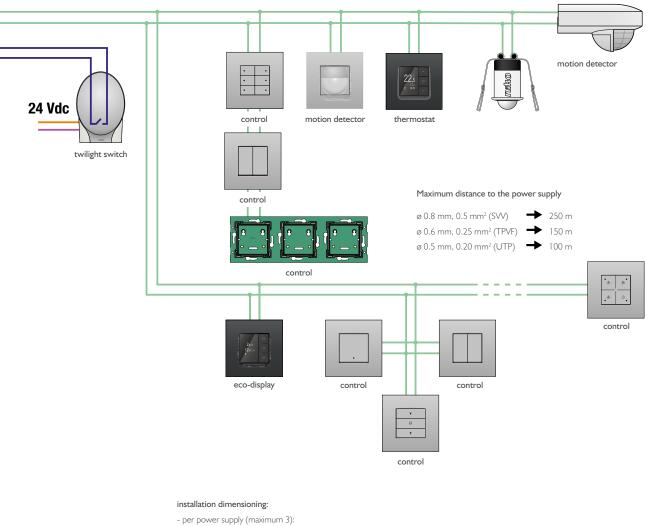
example wiring diagram: smartphone and tablet

Schematic presentation of the installation



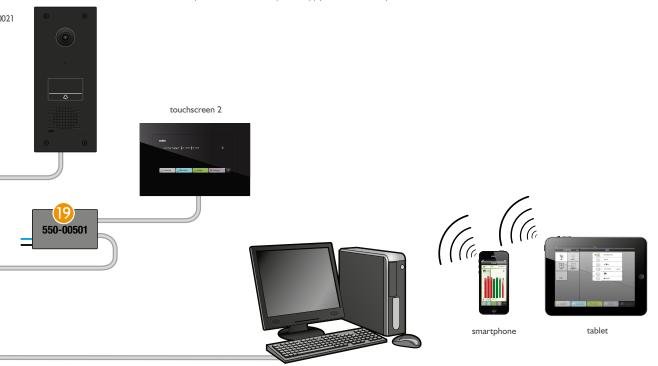
home network (W)LAN

Two-wire, non-polarised - Free topology



- 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.





twisted pair cable (UTP, FTP or STP)

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*

 Both the touchscreen and smartphone/tablet display current and past electricity consumption, the difference between day time and night time rates, and

a comparison between current and previous reference periods.

 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.

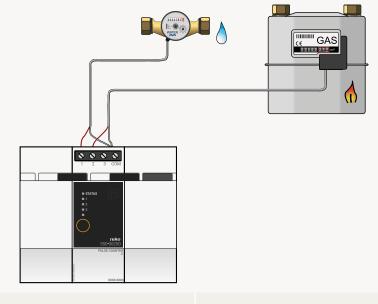
It is also possible to measure the consumption **on specific circuits**. Install the required number of measuring modules as soon as you know which circuits need measuring. A maximum of 20 circuits can be measured.

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 with 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



Note

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

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. Alternatively, you can ask the heating installer or plumber 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 10 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. With the **user software**, the resident can export his measuring data to Excel. Go to **www.niko.be** for a free download of this software (available for Mac and Windows).







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. Several types of **new light sources** have been introduced into the home while traditional incandescent lamps are disappearing. 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.

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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.
 - Ultracompact 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 by touchscreen*
 - smartphone^{*} and tablet^{*}, anywhere in the world
 - 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.
- Using the **user software**, the resident can easily adapt the dimming level of a mood, or the time automation.

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 a 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

Attention:

- 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.

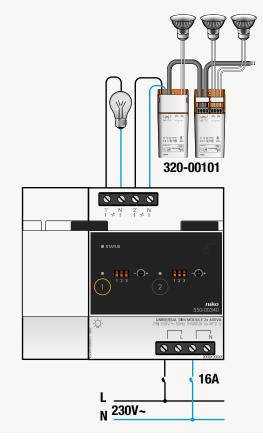
The resident dims the following light sources using the dimming module:

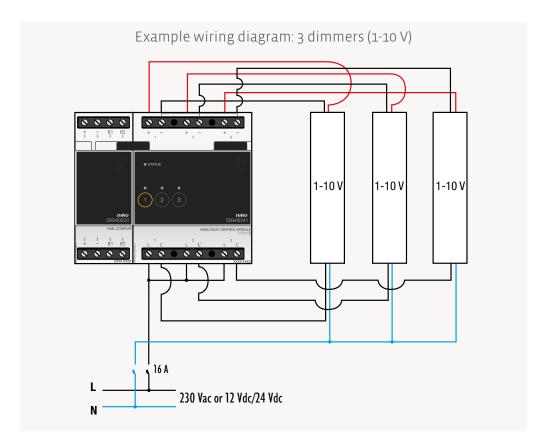
- incandescent lamps
- 230V halogen lamps •
- 12V halogen lamps with ferromagnetic transformer
- 12V halogen lamps with electronic transformer
- dimmable LEDs or LED fittings
- dimmable energy-saving lamps (CFLi) •

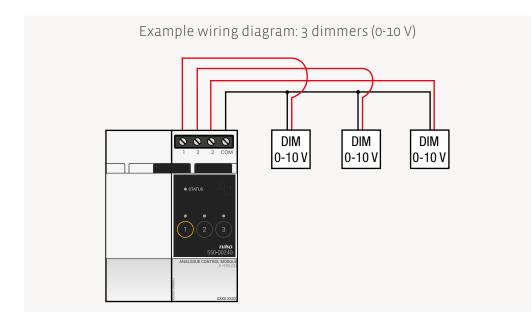
With the analogue control module 0-10 V and 1-10 V, the resident controls high power dimmers and electronic control gear to dim fluorescent lamps and LED strips.



Example wiring diagram: 2 dimmed light circuits



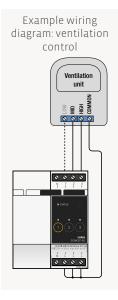




HVAC control

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.



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

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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.



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). After the electronic valve has been activated, it takes 30 to 40 seconds for the throughput to start. After approximately two to three minutes, the electronic valve will be entirely opened or closed.

Connecting the heating control unit to the heating system

The Niko Home Control heating or cooling module takes into consideration the response time of the electronic valve and the running of the heating system after the heating process has been completed.

Three options:

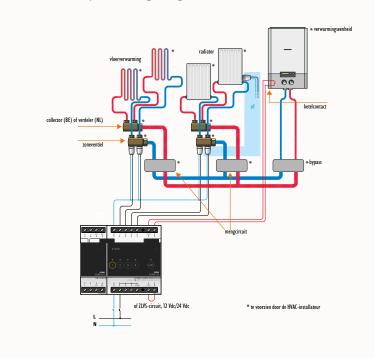


1. The heating system controls the heating unit whenever heating is required.

The heating system can be controlled via the dedicated contact input in addition to its own thermostat. 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 heat within the boiler.

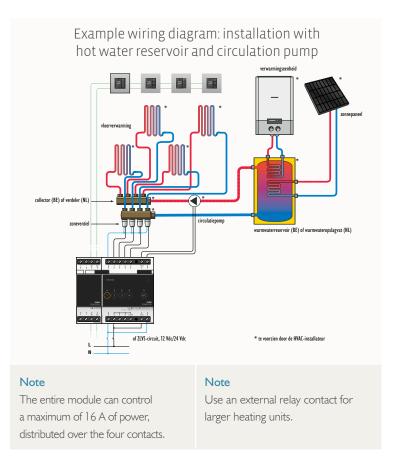
The heating unit maintains its modular capacity because the boiler adjusts its water temperature based on the outside temperature and the return temperature of the water.



Example wiring diagram: installation with boiler

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

The heating module of Niko Home Control allows you to control electric heating systems as well. In this case, the HC contact will not be used.



Air conditioning control

Besides ventilation and heating, the Niko Home Control installation now also controls VRV, VRF or multi-split air conditioning systems (HVAC systems). With the HVAC interface, Niko Home Control is connected to most existing HVAC installations. The resident can check the temperature in each space via the HVAC thermostat. The integration of air conditioning control provides the resident with a more comfortable and energy efficient solution.



Easy to install

- HVAC interface (CoolMaster) is available in different versions per type HVAC system: see www.niko.be (under Applications > Niko Home Control) for more information on the supporting HVAC systems.
- Comfortable adjustment (cooling and heating) per zone via the HVAC thermostat, the touchscreen and a smartphone/tablet*.
- The controls a maximum of 12 zones and 8 indoor units per zone/HVAC thermostat.

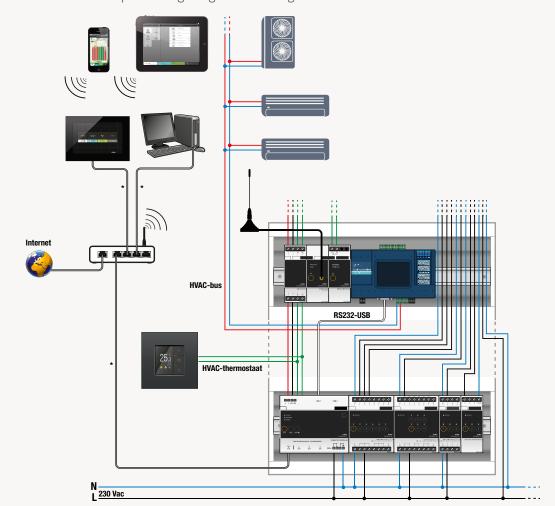
Easy control

- Increased ease-of-use thanks to:
 - HVAC thermostat in same design as the existing Niko push buttons with display
 - Niko Home Control touchscreen*
 - application op smartphone and tablet (iOS and Android)*
- Selection between various programmes with personal settings in line with the resident's needs.
- Control of the air conditioning can also be integrated into the moods.
- The HVAC function of Niko Home Control replaces the separate controls of the HVAC installations. The resident does not have to walk around with the remote control of each indoor unit.

Saving energy

- The HVAC control function of Niko Home Control offers an energy-saving solution:
 - Zones are no longer heated unnecessarily.
 - The cooling system switches to the **eco-setting** when the resident leaves the house or goes to sleep. This means he actively saves energy without compromising on comfort.
 - The pre-programmed minimum and maximum temperatures in the **protect mode**, protect the client's residence against too high or low temperatures during long-term absences.





Example wiring diagram: cabling for two electrical cabinets

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.

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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.
 - Ultracompact modules require minimal space in the electrical cabinet.
 - Operation mode programmable via the programming software: preferred settings, running time for opening and closing ...

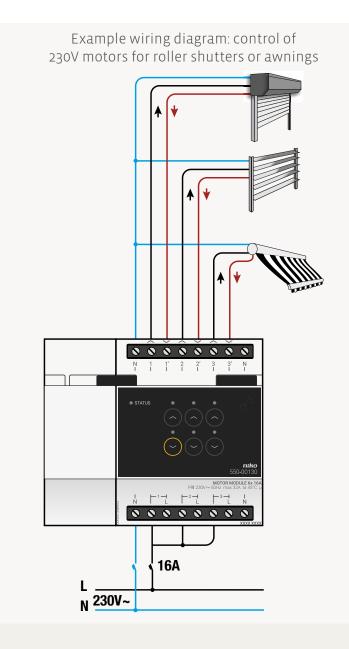
Easy control

- 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 by touchscreen*
 - smartphone^{*} and tablet^{*}, anywhere in the world
 - 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.

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.

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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

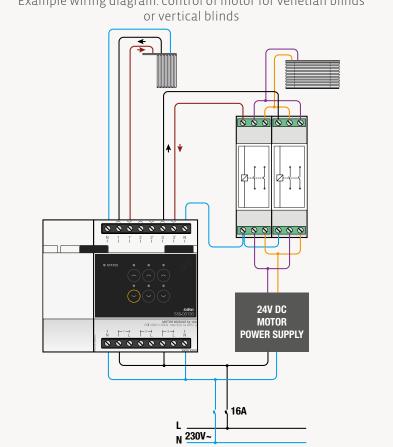
- Modular installation:
 - Ultrasimple dimensioning: one module controls up to three Venetian blinds or vertical blinds.
- A simple, quick and orderly installation process:
 - By using a sliding contact, you do not need to interconnect the bus via cables.
 - You select the control logic via the software.
 - Ultracompact 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 calender settings and heat sensor
 - central control by touchscreen®
 - smartphone[®] and tablet^{*}, anywhere in the world
- Compact control units require minimal space and follow the design of other Niko switching materials.
- Using remote control*, the resident can set the sun Venetian and vertical blinds in the desired position from outside of the home. He can attune the ventilation, Venetian/vertical blinds and the 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.



Example wiring diagram: control of motor for venetian blinds

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 40ms) to allow for accurate control.

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, you want to get out of the house as quickly as possible. If movement is detected while the resident is away from home, he will 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 ...
- By way of a **connection with the emergency centre**, the lights will flash together with the indoor siren.
- Motion detectors not only automatically control the lighting, they can also activate the indoor siren when someone 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.
- 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.*** Going on holiday or out for the evening? 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 do so then.
 - controls the roller blinds and activate 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).

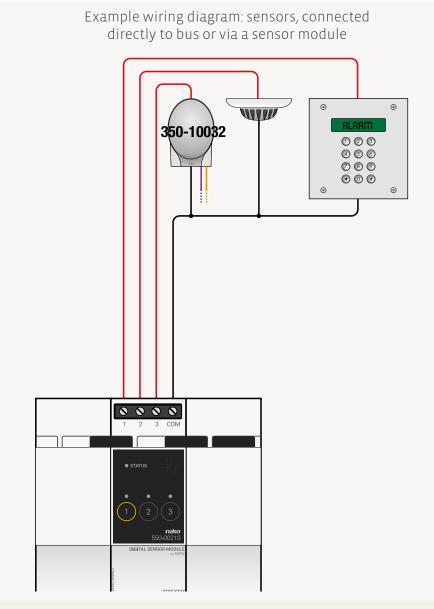
Saving energy

- 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**.

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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.

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



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**, **two**, **three or four touch buttons**, **offers the solution**. Depending on the version, one to four zones can be called. The **touchscreen 2** shows who is at the door and allows the resident to communicate with the visitor and let him in. It even shows who has been at the door during your absence. Indoors a smartphone or tablet can be used as extra internal video unit(s).

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
- father, mother and children who all want their own doorbell

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.

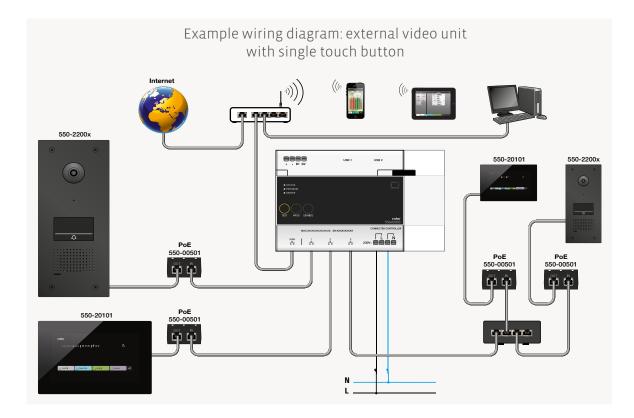
Easy control

- Great ease of use:
 - The resident opens the door and/or gate via the touchscreen 2, the Niko Home Control application or even simply via a Niko Home Control control.
 - Flexible control via the touchscreen 2, possibly supplemented by a smartphone or tablet.
 - The camera **automatically** makes a **video recording** of everyone who rings the doorbell. This means the resident can consult missed calls on the touchscreen 2 or via the application (within the WiFi range).
 - The illuminated version of the external unit ensures that the external unit is clearly visible in all circumstances.
- 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.
 - With the illuminated version of the external unit, the engraved name and doorbell symbol and subtly and homogeneously lighted.
 - The design of the external video unit was awarded with the Red Dot Design Award in 2014.

Saving energy

• The resident **opens the door and/or gate anywhere in the home** via the Niko Home Control application. There is no need to leave them open until the visitor is inside the house.





Design depends on the user

The external unit is provided with a HD camera with a 130° detection angle. Via a full-duplex speech connection, the residents and visitors speak with one another 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. Due to the subtle lighting of the touch buttons, the illuminated version of the external video unit is clearly visible under all circumstances.



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. If the visitor rings the doorbell, he will hear a waiting tune so he can be sure his visit was registered.

How to connect it?

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







The Niko Academy Become the best installer with Niko Home Control

Via our Niko Home Control training courses, we provide installers with extra support. We turn you into a real expert. This ensures that you can give your clients a completely customized installation and provide them with the accompanying service. That is why our training courses are free of charge. Don't hesitate to register: almost 4,000 colleagues preceded you.

We offer three practical training courses.

Basic: Discover

In our online basic course Niko Home Control - Discover you get to know the Niko Home Control installation, from wiring to programming. You can follow this module at home and at your own pace via the Niko Academy, our e-learning platform. You will study:

- the installation and programming from a to z
- the technical features of controls to cabinet modules
- the ease of installation and use
- central control
- energy efficiency

Start your training

- 1. Go to: www.niko.eu/nlbe/niko/myniko/login/
- Log in using your myNiko account. Don't have an account yet? Request one online. Your details are checked manually before granting you access.
- 3. After that, you will start your training course Niko Home Control Discover.

If you successfully complete the test following the training course, you will receive a certificate granting you access to the advanced training course Explore. We also organize this training course in our offices, called

Niko Home Control – Introduction. You can find the next training courses on our website (under 'Help and advice', 'Niko training for the professional'). Choose an available date and register.

Advanced: Explore

The advanced course Niko Home Control – Explore teaches you to completely customise the installation to the needs and electrical systems of your clients, using creative solutions. You programme a comprehensive project including lighting, ventilation, roller blinds.... You learn how to automate and work with touchscreen, smartphone, heating and moods.

Specialisation: Challenge

Niko Home Control – Challenge is a specialisation course. We challenge you to make full use of your creativity, so you can easily find answers to major installation challenges. For example, making use of analogue sensors, alarms and conditions. You receive realistic assignments, which you complete independently and can test immediately.

The training courses Explore and Challenge last one day and are practice-oriented. You receive your own laptop and test installations and our professional trainers will personally consult you. Both modules are only given at Niko in Sint-Niklaas.

For more information, visit www.niko.eu. Want to find out more about the Niko Home Control training courses? Send an email to training@niko.be or call us at 03 778 92 43. Our customer service will answer all your questions.



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

Have your clients register their installation on https://mynikohomecontrol.niko.eu so together with Niko support you can better help in case of issues, and so they can receive important system updates. This registration is also necessary to activate remote control".

my Niko

my Niko is your place to be:

- Register for Niko Home Control Discover.
- · Receive customised information: training courses, events, commercial promotions and useful tips.
- Consult your personal Niko quotations.
- Find out everything about our training courses.
- Keep your personal details up-to-date.

www.niko.eu/nlbe/niko/myniko

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. **guide.niko.eu**

Niko Partner Program

Installers receive special treatment at Niko. Take the Niko Home Control training course and register for the Niko Partner Program. The advantages?

- After a few installations, Niko will promote you to recognised Niko Home Control installer.
- You will be among the first to be informed of software updates and new products.
- Per installation and additional training you earn points for nice gifts from our online shop.

www.nikopartnerprogram.eu

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 Plexiglass. Your guarantee of an elegant and sustainable finish. Top design, made affordable.



stainless steel on anthracite



stainless steel on











black steel





natural red





alu steel grey



alu gold



fluent champagne



skin sensation



alu grey





champagne steel

natural soft grey











Niko Intense

Niko Intense, a series that you have to feel. Niko Intense is all about touch. The **sleek shape** and soft lines radiate intensity. Choosing these switches is choosing a remarkably warm character.











white

sterling

anthracite

bronze

Niko Original

Are you attracted to **soft lines** and **mild colours**? Then Niko Original is just what you are looking for. You choose a finish that is discreetly present at any location.



white



cream







greige





Ready to choose?

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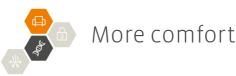


Download the Switch Niko app in the App Store or on Google Play. The contrasting Niko image is available on: www.niko.be/switch-niko-app.



Basic installation

At the back door, in the entrance hall and in the garage switches are placed for the all-off button and the presence simulation. In the bedroom both a panic button and an all-off button to switch off all lighting downstairs are placed. In the storage areas you can automatically switch off the light using the timer function.



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. With their smartphone or tablet, they can control their installation inside the home and anywhere in the world. 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 terrace? Then install a control switch with built-in LED for their outdoor lighting. This way they can see inside if the outdoor lighting stayed on.

Description	Ref.	Apart.	Residence	Large residence
Connected controller light	550-00002	1	1	1
Rail coupler	550-00020	1	1	1
Switching module for	550-00103	1	1	
3 different circuits	330-00103	I	1	
Switching module for	550-00106	1	2	4
6 different circuits	550-00100	I	Z	1
Double vertical wall-mounted printed				
circuit board for use in combination	550-14021	1	2	2
with connection unit, centre-to-centre	550 11021		2	Z
distance 60 mm				
Connection unit for multiple	550-14090	1	2	2
wall-mounted printed circuit boards	550 11070		2	2
Single wall-mounted printed circuit	550-14110	9	15	24
board with connector	550 1110			2.1
Single push button	xxx-51001	7	8	8
Double push button	xxx-51002		8	14
4-fold push button	xxx-51004	1	1	3
6-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	9	15	24
Double flush surround plate, centre-	xxx-76200	1	2	2
to-centre distance 60 mm	~~~~0200	1	2	2

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	1
Connection unit for multiple wall-mounted printed circuit board	550-14090		1	1
Single wall-mounted printed circuit board with connector	550-14110	8	14	22
Outdoor motion detector white	550-20200		1	2
Indoor motion detector	550-20210	3	4	7
Single push button	xxx-51001	3	5	8
Double push button	xxx-51002	2	4	7
4-fold push button	xxx-51004	1	1	5
6-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
Finishing set for indoor motion detector	xxx-55511	3	4	7
Single flush surround plate	xxx-76100	12	16	30
Double flush surround plate, centre- to-centre distance 60 mm	xxx-76200		1	1

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 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



Does the installation detect something is wrong? Your clients will receive alert messages on their smartphone. Motion detectors in the living room and entrance hall and along the facade 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 control of the roller blinds is also automatic. As they are connected to the smoke detectors, they will automatically open in case of fire alarm to provide the residents with an extra escape route. And your clients 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	2		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
Thermostat	550-20101			1
Outdoor motion detector white	550-20200		1	3
Indoor motion detector	550-20210	4	4	6
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
4-fold push button	xxx-51004	1	1	2
6-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	4	4	6
Single flush surround plate	xxx-76100	8	15	26
Double flush surround plate, centre-	xxx-76200	3	4	4
to-centre distance 60 mm	XXX-76200	3	4	4
Ventilation control with LED	xxx-52054	1	1	1
Single flush surround plate	xxx-76100	9	15	19
Double flush surround plate, centre-to-centre distance 60 mm	xxx-76200	4	5	10



Smart heating, smart ventilation

Besides the basic installation, a switched socket outlet is placed 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 in the bathroom, combined with smart ventilation based on presence or absence, reduces energy consumption. Both are linked to the automatic roller blinds. 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	550-00103			1
3 different circuits	330-00103			I
Switching module for	550-00106	2	3	4
6 different circuits Motor module	550-00130	1	1	3
Ventilation module		1	1	5
	550-00140			-
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
4-fold push button	xxx-51004	1	1	3
6-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	15	19
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 with switched socket outlets 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



Niko is the market leader in Belgium and produces solutions for switching material, access control, lighting control and home automation from its headquarters in Sint-Niklaas (Belgium).

Niko invests heavily in research and development as part of its ongoing commitment to focus on well-considered design and to produce the highest quality products in an environmentally-friendly manner. Niko's design philosophy is to consistently create the most innovative, aesthetically pleasing and user-friendly products on the market today.

Niko is a company in full expansion. It employs over 630 people and has an annual turnover of more than 125 million euros. Niko currently has offices across Europe in Belgium, France, the Netherlands, Slovakia and Denmark.

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