

Module for Niko Home Control for measuring the electricity in homes connected to a single-phase network

550-00801

4 year warranty

This module is used to measure your overall electricity consumption, solar production and energy consumption of your individual appliances. Using the Niko Home app and eco display, you can monitor the electricity consumption, production, self-consumption and detect deviations. The measuring module also enables you to use smart energy alerts in Niko Home Control that notify you in case of abnormal energy consumption. If you activate the Niko Home Control solar mode you can start increasing your self-consumption by automatically activating your appliances in case of excessive solar energy. The peak mode enables you to control your peak consumption. The module is equipped with one feedback LED per channel and a status LED.



Technical data

Module for Niko Home Control for measuring the electricity in homes connected to a single-phase network.

- Function: The electricity measuring module is available with one channel or three channels and is used for measuring the consumption or electricity production on one or several switching circuits or phases. Typical applications for these modules:
- measuring the total electricity consumption of the dwelling that is connected to a single-phase supply network.
- measuring the total electricity consumption of the dwelling that is connected to a three-phase supply network 3N 400 V AC.
- measuring the total electricity consumption of the dwelling that is connected to a three-phase supply network 3 x 230 V AC, if it is possible to divide this network into three single-phase circuits.
- measuring the amount of energy generated by photovoltaic solar panels.
- measuring the consumption of specific circuits, such as the upper floor of a house, for instance.
- assessing which devices are heavy electricity users.

The measuring module measures the electrical current in one or several conductors via the current clamps supplied. The module measures the voltage of the phase to be measured via the connection terminals. By measuring both electrical current and voltage, the installation can accurately assess how much electricity is consumed or produced in the home. All values measured are sent to the Niko Home Control installation. The eco-display shows the total electricity consumption and the electricity production, if applicable. A detailed overview of these data can be requested via the touchscreen, a smartphone or the Niko Home Control energy software. If you want to keep track of your home's past electricity consumption, then the installation must be fitted with an IP module that logs the measuring data.

Select an electricity measuring module with one channel or an electricity measuring module with three channels, based on the number and type of channels you wish to measure. Alternatively, the electricity consumption can be measured by a pulse counter provided that the electricity meter is fitted with a pulse output.

If the Niko Home Control installation is fitted with an IP module, then this module can be used to store measuring data. How long the IP module will store this data for will depend on the number of channels in

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the installation. An overview is provided in the table below. If the resident wishes to store this data for an extended period of time, then he or she must back up this data using the Niko Home Control energy software before the existing data will be overwritten.

Provided that everything is installed correctly, the electricity consumption will always be displayed as a positive number while the amount of electricity generated (e.g. by solar panels) will always be displayed as a negative number. You can verify this via the eco-display, the touchscreen or the energy software.

Use the programming software to select the currency of your choice: EUR or GBP. The following settings can be selected per channel:

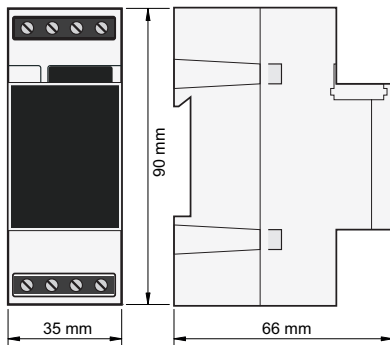
- channel name.
- single-phase or three-phase use.
- channel type: global (meter from the energy supplier), consumer, amount generated.

When the module is functioning properly, the STATUS LED will light up in TEST mode only. If one or several errors occur, the LED will blink to indicate the error code of the error with the highest priority.

- measurement range: 5 - 14 500 W, 22 mA - 63 A
- accuracy: IEC62053-21 class 1 (R), class 2 (L)
- single-phase connection: 230 V AC, 50 Hz
- 1 current clamp (included)
- cable thickness for the current clamp: 1 x 10 mm² or 6 x 2.5 mm² or 9 x 1.5 mm²
- length of the connector cable at the current clamp: 100 cm
- not suited to measuring direct current components
- measuring units only for information purposes, not valid for invoicing
- Sliding contact to connect the module to the following module on the DIN rail
- Input voltage: 230 Vac ± 10 %, 50 Hz
- Maximum MCB rating: 20 A (limited by national installation rules)
- Connection terminals: 4 connection terminals to measure the voltage of the connected circuit and 2 connection terminals to connect the current clamp included
- Wire capacity
 - 3 x 1.5 mm² of 2 x 2.5 mm² or 1 x 4 mm² wire per terminal
- DIN dimensions: DIN 2TE
- Dimensions (HxWxD): 90 x 35 x 66 mm
- Marking: CE



Dimensions



Wiring diagram

