

## Group control for 3 electric drives GU-4.3M Passport



### 1. Purpose

Group control for 3 electric drives GU-4.3M is intended for simultaneous control of several (up to 3) electric drives of roller shutters, roller blinds from one or several key switches.

### 2. Specifications

Supply voltage range, V~/Hz.....	187-253/50
Consumption current, mA, not more than.....	50
Number of controlled electric drives.....	3
Maximum permissible current for each electric drive, A.....	3 (at cos=1)
Overall dimensions, mm.....	51×51×22
Operation temperature range, °C.....	from 0 to +40
Section of interconnecting wires:	
for connection to the power supply, mm <sup>2</sup> .....	1,5-2,5
for connection to the electric drives, mm <sup>2</sup> .....	0,75-1,5
for connection to the key switches, mm <sup>2</sup> .....	0,5-0,75

The product is not intended for installation and operating in explosion hazard and fire hazardous zones and does not require the protective earth.

### 3. Peculiarities

- protection against simultaneous activation in both directions;
- using multiple switches;
- possibility to use any linear drives radio, Nero, Nero II instead of switches;
- small overall dimensions.

### 4. Connection

Use wires with a cross-section of at least 0.75 mm<sup>2</sup> in double insulation to connect the device to the network and to the electric drive.

It is prohibited to use mounting wires and cables with polyethylene insulation or sheath.

It is prohibited to install the device at a distance less than 1 m from heating devices.

Installation and maintenance of the product must only be carried out by qualified personnel in compliance with safety measures.

- ! All work on connecting the product must be performed only when the mains voltage is switched off 220-230 V~.
- ! It is forbidden to power the GU-4.3M from devices that generate a non-sinusoidal shape of the voltage curve, for example, from uninterruptible power supply devices that have a non-sinusoidal output!

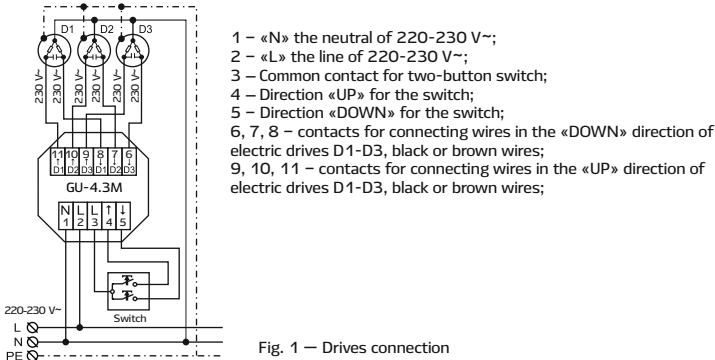


Fig. 1 – Drives connection

### 5. Intended use

#### 5.1. Combination of GU-4.3M, GU-4RM and two key switches.

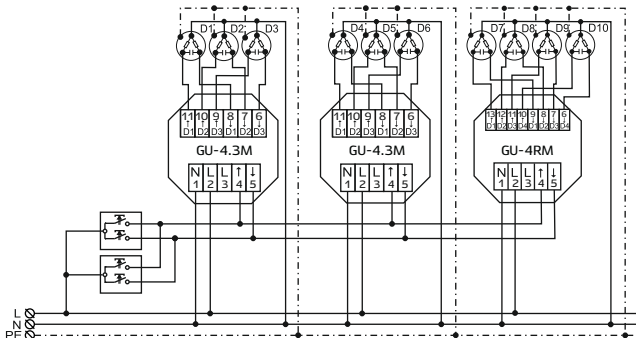


Fig. 2 – Control of 10 electric drives

- ! When connected to the GU-4.3M of two or more key switches, the control of the roller shutters will be the same for all the roller shutters: all the roller shutters move «UP» or «DOWN».
- ! If several key switches are connected to the GU-4.3M and at least one of them is blocked, the control from the others will also be blocked.

- ! You can't manage a separate roller shutter.
- ! Don't connect the key switches directly to the electric drive in parallel with the GU-4.3M (4 RM).

#### 5.2. Division of electric drives into groups by power supply.

If the electric drives exceed the total power of 1.5 kW, then it is necessary to divide them into several power groups.

The power supply must be connected to each group of electric drives by a separate cable (with a cross-section of at least 1.5-2.5 mm<sup>2</sup>), as shown in Fig. 3.

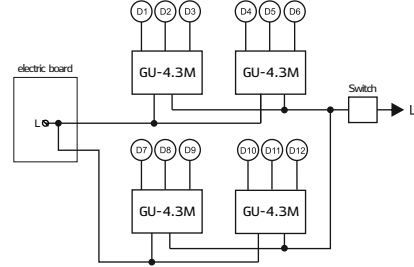


Fig. 3 – Division of electric drives by power supply into 2 groups

#### 5.3. Load distribution between the phases of the supply network.

If the total power of the electric drives is large, they must be distributed between three phases. This connection will reduce the peak phase load and avoid uneven phase load- phase mismatch.

To do this, you must:

1. divide all electric drives into groups with a total power of no more than 1.5 kW;
2. connect the formed groups to different phases of the power supply network (see Fig. 4).

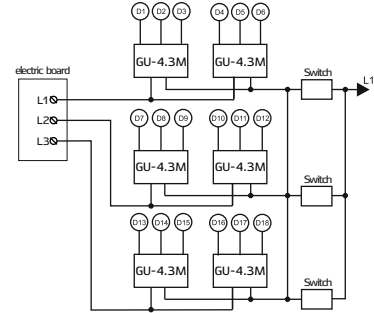


Fig. 4 – Connecting the GU-4.3M to different phases of the supply network

#### 5.4. Use of the GU-4.3M in combination with other automatic control devices.

Instead of a key switch, the group control can be connected to other devices designed to control the electric drive with a supply voltage of 220-230 V~; for example, actuators of Radio lines, Nero, Nero II, wired solutions or devices from other manufacturers. Examples of various compounds are shown in figure 5-9.

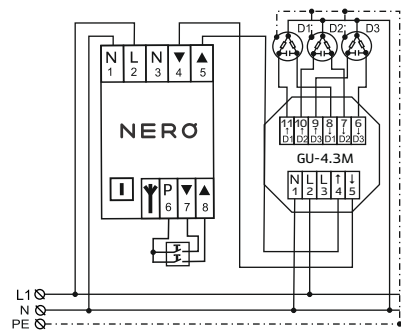


Figure 5 – Connecting the 8113 micro Radio to the GU4.3M

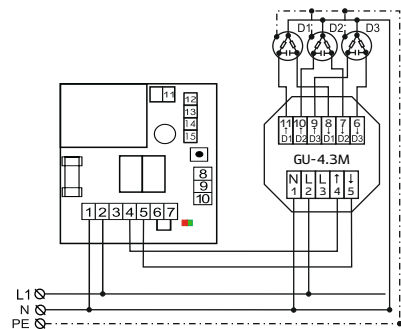


Fig. 6 - Connecting the 8113 IP65 radio receiver to the GU-4.3M

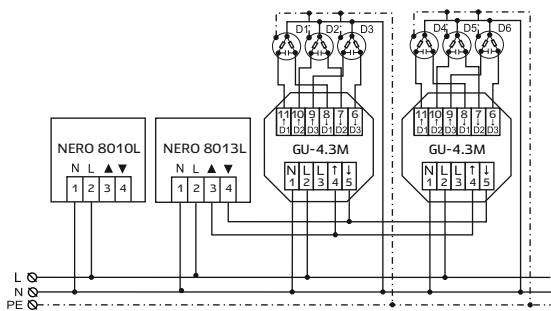


Fig. 7 — Connecting the Nero 8010L and Nero 8013L to the GU-4.3M

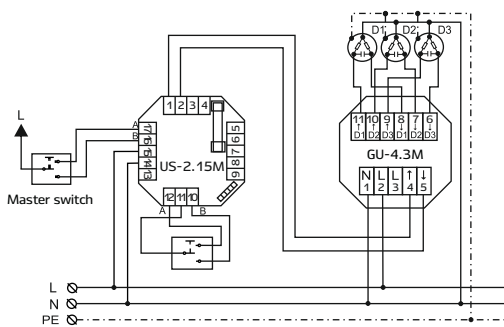


Fig. 8 — Connecting the US-2.15 M to the GU-4.3M

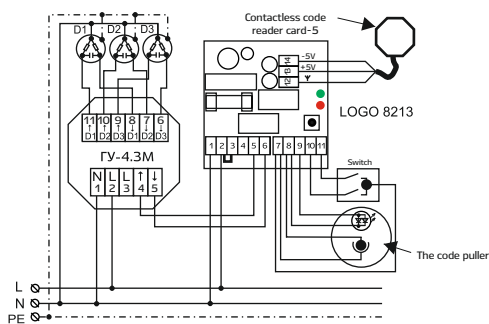


Fig. 9 — Connecting Logo 8213 to the GU-4.3M

## 6. Device operation

The device operates when the control key is pressed, that is, the roller shutter moves until the mechanical limit switches are stopped or the control key is released.

## 7. Routine maintenance

If a malfunction is detected during operation, immediately disconnect the device from the mains and call service personnel. Repair of the product during the warranty period and service is performed by the manufacturer's dealer.

## 8. Storage, transportation, service life

Products should be stored in packaging at temperatures from + 5°C to + 40°C and relative air humidity of no more than 80% in heated and naturally ventilated warehouses, in air-conditioned warehouses in the absence of aggressive impurities, conductive dust, acid fumes and alkalis, as well as gases that cause corrosion and destroy insulation. During storage, sharp fluctuations in temperature (more than 3°C/min) and air humidity (more than 5%/min) are not allowed.

Products must be transported in package in containers, closed railway cars, heated sealed compartments of aircraft and holds, as well as automobile transport with protection against precipitation at any distance at temperatures from -50°C to + 50°C, and with relative humidity up to 100% - at 25°C. When transporting products, protection from dust and atmospheric condensation should be provided.

The average product life is at least 5 years.

## 9. Disposal

At the end of its service life, the product must be disposed of in accordance with the laws of the host country. The product is not dangerous for human life and health, as well as for the environment. The product does not contain non-ferrous and precious metals.

## 10. Manufacturer's warranties

The warranty shelf life is 6 months from the date of manufacture (the last 6 digits in the serial number of the device, for example: 191120 - November 19, 2020).

The warranty period is 24 months from the date of sale.

In the absence of a mark on the sale - from the date of manufacture.

Warranty obligations do not apply to the product in case of mechanical damage, as well as in case of non-compliance with storage, transportation and operation conditions. Warranty obligations do not apply if the passport is not submitted.

## 11. Completeness

Group control GU-4.3M.....1pc.  
Data sheet.....1pc.  
Individual package.....1pc.

## 14. Acceptance certificate

The group control GU-4.3M (see the serial number on the first page) is made in accordance with the requirements of TR BY 14600442.001-97, accepted by the Quality Control Department and recognized as serviceable.

## 15. Potential problems

Problem	Possible cause	Troubleshooting
Device does not function.	a) the supply voltage is not applied; b) the wires in terminals 1 and 2 are poorly clamped;	a) supply voltage; b) clamp the wires in terminals 1 and 2.



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