

Operating Instructions

RATIO® Radio Bus System

REG Blinds Actuator 4-channel 6A

REGJ24/01



General Information:

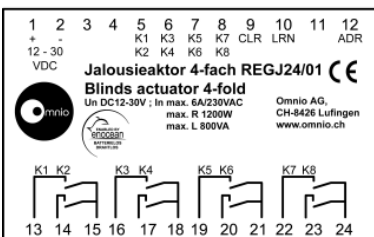
The Ratio® switch actuators/receivers are controlled via radio signals of the Ratio® radio transmitters. Every transmitter can control an unlimited number of actuators/receivers. The Ratio® radio transmitters have a fixed address and must be learned in for Ratio® switch actuators / receivers.

Product description:

The Ratio® REG blinds actuators 4-channel REGJ24/01 is a device for installation in a distributor. By means of Ratio® radio transmitters four different and independent blinds or doors can be controlled via four isolated outputs.

Different functions can be assigned to the transmitters by means of the parameterization kit PK REG, e.g. key sequences or switch-off delay 10 minutes, i.e. the Ratio® REG switch actuator consists of the device (hardware) and the application program (software).

The radio receiver antenna is integrated in the device. For example, if one or several (up to max. 8 units) Ratio® REG actuators are to be installed in a distributor made of steel, then the external receiver unit UPIASB/01 has to be used. This external receiver unit is installed outside the distributor, e.g. in a distribution box, in a lowered ceiling or in a cable channel and connected to the Ratio® REG actuators by means of a telephone cable (3x.075mm²), the so-called ASB bus. The up to eight possible Ratio® REG actuators are also connected with each other by means of a telephone cable (2x0.75mm²) and thus communicate with each other via the ASB bus. The external receiver unit receives the radio telegrams and passes them on bus to the Ratio® REG actuators via the ASB.

Position and function of the display and operating elements	Technical data																				
 <p>Jalousieaktor 4-fach REGJ24/01 Blinds actuator 4-fold Un DC12-30V ; In max. 6A/230VAC max. R 1200W max. L 800VA</p> <p>Omnio AG, CH-8426 Lufingen www.omnio.ch</p> <p>A1: Button to switch from normal to learning mode and learn in and unlearn transmitters A1': LED indicating a valid telegram in the learning mode A2: Button for unlearning all learned-in transmitters A2': LED indicating the learning mode A3: Screw-type terminals 4mm² for connection of the supply voltage and the load circuit</p>	<p>Connection voltage: 24VDC</p> <p>2 x4 closing contacts 6A potential-free, Rated current 6A / 250VAC</p> <p>Inrush current 20ms/30A Nominal current: 6A for switch actuators</p> <table border="0"> <tr> <td>Switched power AC1</td> <td>1500VA</td> </tr> <tr> <td>Switched power AC15</td> <td>300VA</td> </tr> <tr> <td>Incandenscent bulb</td> <td>750W</td> </tr> <tr> <td>Halogen lamp 230VAC</td> <td>500W</td> </tr> <tr> <td>Fluorescent bulbs compensated</td> <td>200W</td> </tr> <tr> <td>Fluorescent bulbs uncompensated</td> <td>300W</td> </tr> <tr> <td>Fluorescent bulbs Duo-switched</td> <td>300W</td> </tr> <tr> <td>electronic ballast assuming max.10 uF</td> <td>1 Stk.</td> </tr> <tr> <td>Motor 1Ph AC3/230VAC</td> <td>0,185kW</td> </tr> <tr> <td>Capacitive load</td> <td>10uF</td> </tr> </table>	Switched power AC1	1500VA	Switched power AC15	300VA	Incandenscent bulb	750W	Halogen lamp 230VAC	500W	Fluorescent bulbs compensated	200W	Fluorescent bulbs uncompensated	300W	Fluorescent bulbs Duo-switched	300W	electronic ballast assuming max.10 uF	1 Stk.	Motor 1Ph AC3/230VAC	0,185kW	Capacitive load	10uF
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Installation instructions

The device may only be used for fixed installation indoors, in dry rooms and for installation in distributors, ideally made of plastic.

Warning:

- The device may be installed in distributors (230VAC) and may only be installed and taken into operation by a licensed specialist electrician.
- Please make sure that the device can be enabled by means of a line safety switch.
- For insulation tests, the connection line (outer and neutral wire) have to be connected with each other.
- For wire insulations tests which, contrary to today's valid standard DIN VDE 0100 T.610, measure wire against wire, the device has to be disconnected; otherwise, it may be destroyed.
- When planning and setting up electrical systems, the pertinent directives, rules and regulations applicable in each country have to be observed.
- The applicable safety and accident prevention regulations have to be observed.
- The technical data of the device, in particular the data of the switch contact, have to be observed.
- Do not open the device. A defective device has to be returned to the trader or the Omnia AG agency in charge.

Assembly and Wiring

The Ratio® REG actuator can be used in distributors or in devices.

The position and the ranges depend on the materials used in a building. Do not install the Ratio® REG actuator in a casing made of metal or in the immediate vicinity of large metal objects. Installation close to the floor or on the floor is not recommended. See the data sheet Range Planning under www.omnio.ch.

Connecting control and load circuits:

- The connections consists of screw-type terminals 4mm².
- Strip the wires approx. 9..10mm, insert them into the terminal and tighten the screws using a screwdriver size 1.
- Max. two wires with 1.5mm² cross-section may be connected.

Range between transmitter and receiver

The signal strength of the radio signals decreases with rising distance between transmitter and receiver. If there is any visual contact, the range is approx. 30m in corridors and 100m in halls. In buildings the range of the radio signal is dependent on the construction materials used:

Material	Typical range	Material	Typical range
Brickwork	20m, through max. 3 walls	Plaster boards / wood	30m, through max. 5 walls
Reinforced concrete	10m, through max. 1 wall / ceiling	Heat-insulating windows	5m, through max. 1 window

Limitation of the range of the radio signals due to:

- Installation of the transmitters / receivers in the direct vicinity of materials with metal components or metal objects. A distance of at least 10cm should be observed.
- Installation of the receivers on the floor (floor outlet) or close to the floor
- Humidity in materials

Devices that also emit high-frequency signals, e.g. computers, audio and video systems or electronic ballast for illuminants. A minimum distance of 50cm should be observed.

Learning in and unlearning of radio transmitters

Turning the learning mode on:

Keep the **LRN** button pushed. After 2 seconds the learning mode of channel no. 1 of the Ratio® receiver becomes active, which is indicated visually by the flashing LED of channel 1 and by connected consumer. Briefly push the **LRN** button again to switch to the next channel.

Turning the learning mode off:

If you push the **LRN** button more than 2 seconds while the learning mode is turned on, the learning mode is turned off. The learning mode is also quit or disabled automatically if no button of a Ratio® radio transmitter is pushed for 30 seconds.

Learning in Ratio® radio transmitters:

If you push a button of a Ratio® radio transmitter or the Learn button of a Ratio® radio sensor (room sensor, window contact), the respective button of the active channel is assigned to the Ratio® receiver in the learning mode. The transmitter assignment is confirmed by the fact that the flashing stops for 4 seconds. Then the flashing starts again and you can learn in up to 30 more Ratio® radio transmitters/sensors into the active channel.

Briefly push the **LRN** button to switch to the next channel.

In the learning mode, a transmitter must not be farther away than 5m from a receiver, since the receiver is working with a limited range in the learning mode.

Selective clearing of transmitters:

Individually learned in Ratio® radio transmitters/sensors can be deleted selectively. To this end, the Ratio® receivers must be switched to the learning mode (push **LRN** button for 2 second) and switch to the respective channel. If an already learned in button of a Ratio® radio transmitter/sensor is now pushed, this button will be unlearned immediately.

Delivery status:

Keep the **CLR** button pushed. After 2 seconds all learned in Ratio® radio transmitters/sensors will be cleared from the memory and then the program automatically switches over to the learning mode of channel 1.

Parameterization of the functions

The parameters of the application program can be set using the parameterization kit PK REG Art. No. 4901000. The following parameters are possible:

- Key sequence / Pulse switch
- Single keys
- Switch-off delays
- Value thresholds (in connection with analog sensors such as room temperature sensor).

See also the operating instructions for the parameterization software.

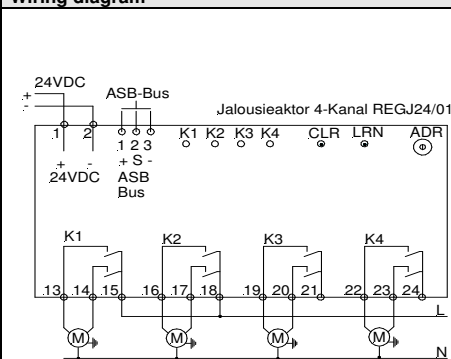
Legal requirements / old devices

The transmitters may not be used in connection with devices that are employed, directly or indirectly, for health- or life-saving purposes or if their operation may cause hazards to human beings, animals or property. Do not leave packaging material lying around carelessly. Plastic foils/bags, etc. may be hazardous toys for children.

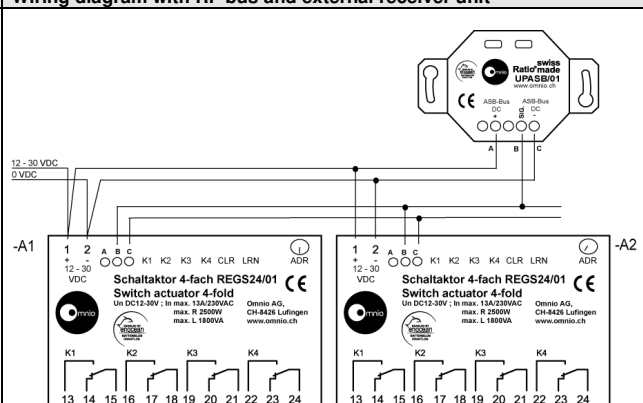
These operating instructions are part of the device and part of our warranty terms. They have to be handed over to the customer. The technical specifications of the device may be changed without prior notice.

Do not throw old devices into the domestic garbage can. The device contains electrical components that have to be disposed off as electronic waste. The case is made of reusable plastic material.

Wiring diagram



Wiring diagram with RF bus and external receiver unit



Designation

Ratio® REG blinds actuator 4-channel 6A with 4x2 isolated changing contacts, power supply 24VDC

Type

REGJ24/02

Article number

4302000

Accessories

Receiving unit for serial mounted devices (option)

UPASB/01

4900000

Parameterization kit for serial mounted devices (option)

PK-REG

4901000