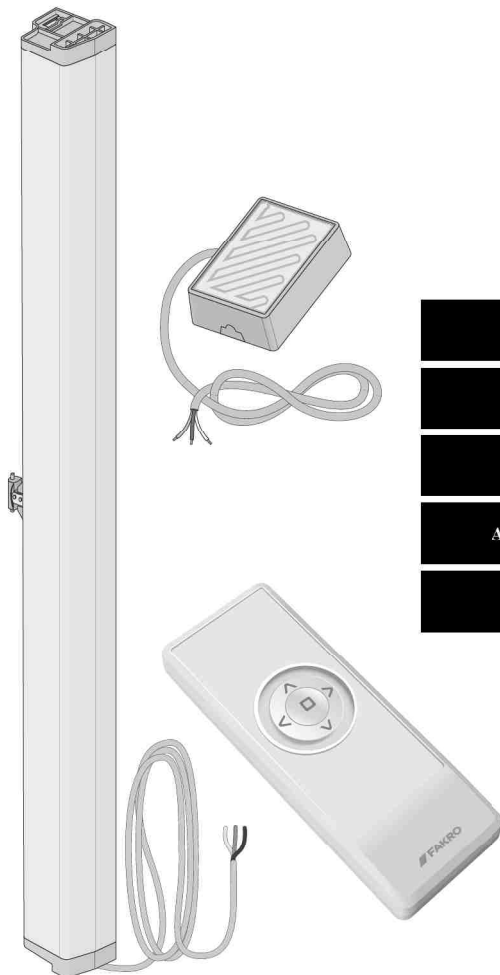


AUTOMATIC CONTROL SET Z-WAVE

**ZWZ230 ZRD**

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Dear Sir/Madam! Thank you for purchasing the product from FAKRO. We do hope that it will meet your expectations. To ensure appropriate functioning of the product, please peruse this User Manual.

SET DESCRIPTION

The ZW230 ZRD set is equipped with two-way Z-Wave radio communication module. The set includes 15VDC actuator equipped with a chain featuring maximum extension at the level of 24cm, hermetic power supply 60W (enables connection of electric accessories), ZRD rain sensor, multi-channel remote control and aesthetic cover element with manual control panel. The actuator's chain is finished with a special tip that allows to block it in the holder of the installation set. The power cable OMY 3x1,00mm² is located on the right side of installed product. The ZW230 is factory assigned to the first channel of the remote control to the first group of control buttons.

TECHNICAL SPECIFICATION			
<p>Working temperature: -10°C to + 65°C</p> <p>Power voltage: 100-240V AC ~50Hz</p> <p>Power supply rated power: 60W</p> <p>Actuator rated power: 12W</p>	<p>Standby current: 0,03A</p> <p>Power cable: 3x1mm²</p> <p>Limit switch: Overload when closing, Contact when opening</p>	<p>Chain closing/pushing force: 250N</p> <p>Chain extension speed: 4,25mm/s</p> <p>Chain outreach: 240mm</p> <p>Protection class: IP31</p>	<p>Radio protocol: Z-Wave</p> <p>Reach: Up to 20m in building</p> <p>Frequency: EU - 868,42 MHz; AS/NZ - 921,42 MHz; US/Canada - 908,4 MHz; RU - 869 MHz. (depending on version)</p>

PROGRAMMING BUTTON*



Programming button enables adding the set to the Z-Wave network. It is also used to add the set to selected groups, remove from those groups as well as to remove the set from the Z-Wave network.

i *Note! Information concerning programming procedure can be found in the user manual of the remote control.

MANUAL CONTROL BUTTON



In order to manually control the set press manual control button. It works in sequential cycle, e.g. start, stop, start in the opposite direction, stop – etc.

1. First press of the button makes the chain extend.
2. Second press of the button stops the chain.
3. Next press of the button closes the chain.

ACTUATOR OPERATION SIGNALLING



Cause 1: actuator reached end position – chain is closed.
Cause 2: current consumed by the actuator is too high. In case of problems with operating please contact FAKRO Service Dept.

Z-WAVE NETWORK STATUS SIGNALLING



The device has been assigned to the Z-Wave network



The device has not been assigned to the Z-Wave network

SAFETY RULES



CAUTION! DANGEROUSLY MOVING PARTS. WATCH OUT FOR YOUR FINGERS AND OTHER BODY PARTS!



STOP – Press the manual control button once to stop the device in operation.



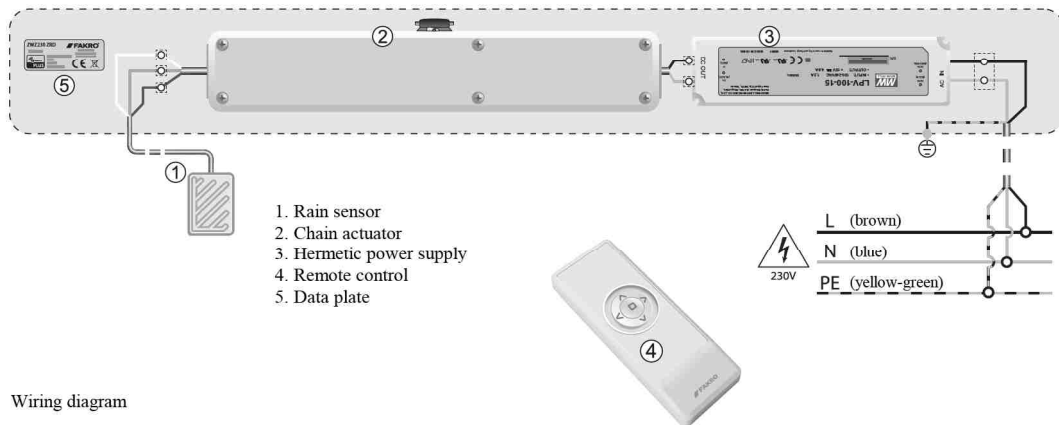
The window may close automatically (without warning) under the influence of the signal received from the ZRD rain sensor!

When installing the ZWZ230 ZRD set it is required to observe the following recommendations:

- Safety requirements should be particularly respected. The ZWZ230 ZRD set is equipped with electric actuator. The use of the actuator fitted to operate the window poses a risk of injury. Although the mechanism of the actuator is equipped with an overload switch, forces present there are strong enough to cause physical injuries. When closing, the ZWZ230 exerts the force of 250N (app. 25 kg)!
- If the device is easily accessible, e.g. the lower window edge is situated lower than 2.50m above the floor level, then special safety measures should be adopted so as to prevent health hazards.
- This equipment is not designed for use by people (including children) with limited physical, sensory or mental ability, or by people that do not have experience or knowledge of equipment, unless it is done under supervision or according to the product original user manual provided by a person responsible for safety. Do not allow children to play with the equipment.
- After unpacking, check the ZWZ230 ZRD set elements for any signs of mechanical damage.
- The ZWZ230 ZRD set must be installed in accordance with the fitting instructions supplied with the product and the connection to the power supply should be made by an authorised installer.
- Before connecting the ZWZ230 ZRD set make sure that the power supply corresponds with the voltage specified on the data plate.
- Plastic containers used for packing should be stored out of children reach as they may be a potential source of danger.
- Children are not allowed to play with the remote control of ZWZ230 ZRD set, the remote control should be stored out of their reach.
- The ZWZ230 ZRD set should be used according to its intended design. FAKRO shall not be responsible for any consequences being the result of improper product use.
- The ZWZ230 ZRD set has been designed and adapted for installation in FAKRO roof windows.
- Any activities related to cleaning, adjustment or dismantling the ZWZ230 ZRD set should be preceded with disconnecting it from the 230V power supply.
- The system should include an easily accessible double-pole disconnecter with a contact separation of at least 3 mm.
- Electric parts must not be washed using solvent-based substances or open stream of water (do not immerse in water).
- Any repairs of the device should be carried out by service authorised by the manufacturer.
- Electric wires supplying electricity from the power source must have suitable area (3x1mm²). Permissible wire length for the mentioned area is 30 m.
- The system supplying the set should be protected by means of a 10A fuse.

WIRING DIAGRAM

The set must be connected to the network following a diagram below.



Wiring diagram

QUICK START

Once the ZWZ230 ZRD set is installed and connected to the mains, you can operate it immediately. If the control set does not respond to the remote control:

- reset the remote control
- remove the ZWZ230 ZRD set from the Z-Wave network
- add the ZWZ230 ZRD set to the Z-Wave network
- add the ZWZ230 ZRD set to selected group

i *Note! Information concerning programming procedure can be found in the user manual of the remote control.

ADDITIONAL ACTUATOR FUNCTIONS

ALL ON / ALL OFF – Turning on this function enables simultaneous control of all devices.

ENCRYPTED TRANSMISSION – Actuator added to the network in this mode can only be controlled by remote controls having this function. This function is useful if the device is to be operated only by authorized users.

ASSOCIATING DEVICES – This function allows for such configuration of devices associated in one Z-Wave network that controlled device runs other device. For example, a window equipped with a rain sensor can send closing signal to other windows when rain appears.

i Note! Information on how to define additional functions can be found in user manuals of remote controls.

WARRANTY

The manufacturer guarantees correct device functioning. It also undertakes to repair or replace faulty device if damage is a result of material or structural faults. The warranty period is 24 months from the date of purchase, fulfilling the following conditions:

- Installation has been performed as per manufacturer recommendations.
- Seals remain intact and no authorised structural changes have been made.
- The device has been used in accordance with its intended use as per user manual.
- Damage is not a result of improperly made electrical system or atmospheric phenomena.
- The manufacturer is not liable for damage which occurred as a result of improper use or mechanical damage.
- In case of failure, the device must be submitted for repair with a Warranty Card.

Defects revealed within the warranty period will be removed free of charge no longer than 14 days after accepting the product for repair. Warranty and post-warranty repairs are performed by the manufacturer i.e. FAKRO PP. Sp. z o.o.

FAKRO Sp. z o.o.

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Quality certificate:

Device

Model

Serial number

Seller

Address

Purchase date

Invoice No

Signature (stamp) of person installing a device

