

# FTP-V Z-Wave FTU-V Z-Wave

**Electric window**  
User Manual



[www.fakro.com](http://www.fakro.com)

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

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## Safety requirements

When installing FTP-V, FTU-V Z-Wave window it is necessary to observe the following recommendations:

- Safety requirements should be particularly respected. The use of electric mechanical actuator installed in order to operate the window creates 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 window, the actuator exerts the force of 250N (app. 25 kg)!
- If the Z-Wave window is easily available e.g. window's bottom edge is lower than 2.50m from the floor, special precautions should be taken in order not to allow rising of health risk.
- 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 equipment usage instructions, which are provided by the person responsible for safety. Do not allow children to play with equipment.
- After unpacking, check the window elements for any signs of mechanical damage.
- Installation should be performed by a qualified person in accordance with the manufacturer instructions.
- Before connecting the window, make sure that the power voltage corresponds with 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 controllers, controllers should be stored out of their reach.
- The window should be used according to its intended design. The FAKRO Company shall not be responsible for any consequences being the result of improper window use.
- Any activities relating to cleaning, adjustment or dismantling electric parts of the window should be preceded with disconnecting the power supply.
- Electric parts cannot be washed using solvent-based substances or open stream of water (do not immerse in water).
- Any repairs of the window should be carried out by service authorised by the manufacturer.
- Electric wires supplying electricity to the power source must have suitable area (2x1mm<sup>2</sup>). Permissible cable length for the mentioned area is 30m

Description for the user manual of FTP-V Z-Wave, FTU-V Z-Wave NC429

1. To prevent condensation of water vapour on the window during the winter, it is necessary to make properly lining of the window and place source of heat directly under the window.

2. By using the air inlet, automatic air exchange with surroundings is possible under the influence of the pressure difference. It is possible on condition that the gravitational ventilation in the room works properly. Manual regulation of the air inlet opening is possible.

3. Operating the window by means of actuator helps to increase ventilation of the room.

4. In case of rooms where ventilation through ventilation wires does not work properly, it is necessary to ventilate the room by complete opening of the window.

5. By turning the handle through 90 degrees, the window is unlocked and manual rotation of the sash through 180 degrees is possible. When closing the window, it is necessary to pay special attention that before locking the handle, the window sash is pressed strong enough, so as not to damage the chain's catch.

6. Due to appropriate lock (p.6, NC429) it is possible to clean safely the external side of the window glazing unit.

7. In order to enjoy the longest possible failure free use of the window, periodic preventive maintenance works are recommended.

For appropriate work of the rain sensor – cleaning its surface;

Removing leaves and other dirt from flashing at least once a year in order to ensure proper flow of rain water;

In areas with heavy snowfalls, precipitation lying for a long time should be removed. This helps to reduce danger of freezing of melting snow on the window's bottom elements.

8. Periodic lubrication of hinges for their proper work is recommended.

9. In case of wooden windows coated with ecological, clear acrylic lacquer, depending on exploitation, repainting is recommended every 3-5 years.

10. Actuator is factory programmed on the first channel and on the first group of buttons on the remote control. The ZWP10 remote control communicates with the window by using radio waves. It is possible to change the programmed channel. To do this, refer to the user manual of ZWP10 (NC851) remote control.

11. Press appropriate button to operate FTP-V Z-Wave window.

12. Press appropriate button to operate external accessory: ARZ Z-Wave roller shutter or AMZ Z-Wave awning blind.

13. Press appropriate button to operate internal accessory: ARF Z-Wave or ARP Z-Wave roller shutter or AJP Z-Wave Venetian blind.

14. In order to connect ARZ Z-Wave external roller shutter or AMZ Z-Wave external awning blind, unscrew top trapezoid cover of the window. There is also plug-in socket to connect the rain sensor.

15. In the Z-Wave window, wires (15VDC) are run in the frame enabling supply of electric internal accessories: ARF Z-Wave, ARP Z-Wave or AJP Z-Wave.

16. Sample electrical connection of four FTP-V Z-Wave windows into one network. Such connection allows operating up to 12 receivers with a single controller (ZWK keyboard, ZWG keyboard, ZWP remote control). One ZWD wind sensor can close all windows simultaneously. The FTP-V Z-Wave window is equipped with the rain sensor as standard.

17. In windows with width of 78cm and more, power supply is positioned inside the window frame with actuator under plastic plate.

18. In windows with the smaller width or equal to 66 cm, power supply is positioned outside the window.

19a. Windows connected into one network should be programmed as needed. For this purpose it is necessary to access the actuator by dismantling plastic plate. Two screws fastening the plate are screwed out from the outside.

19b. Dismantle the plastic plate covering power supply and actuator.

19c. Programming button is on the actuator.

20. Sample electrical connection of three FTP-V Z-Wave windows in a house/flat. The FTP-V Z-Wave window is installed in all three rooms. The ZWMP weather module is installed in one of rooms.

For windows and the module, 230VAC current supply is brought. The ZWD wind sensor is connected to the ZWMP weather module. Rain sensors are already factory installed in every FTP-V Z-Wave window.

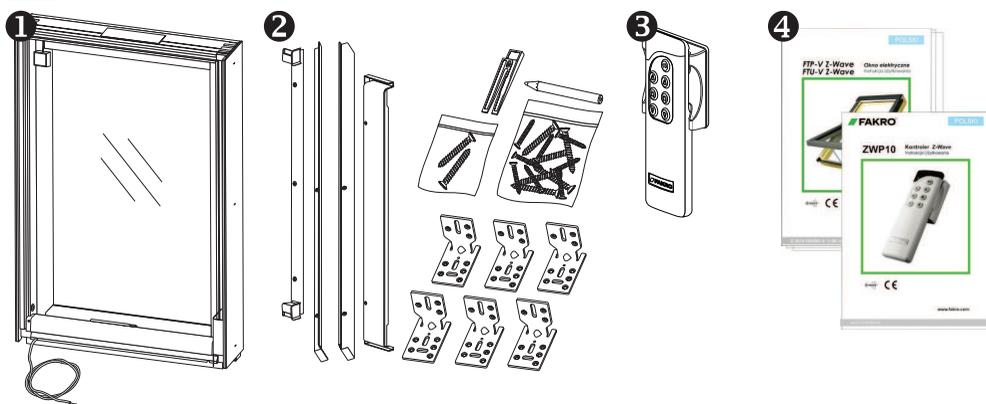
The ZWK keyboard is programmed in every room allowing control of the window as well as accessories installed on this window. The advantage of the keyboard is that it is fixed to the wall and allows operation of windows even in case of losing remote control or running down its batteries. Remote control for windows and accessories operation in order to improve user's comfort is in every room. Additionally, at exit door, keyboard for simultaneous windows operation is placed. It is convenient function, used especially when leaving the house, if the user wants to close all windows simultaneously or when entering the house, if the user wants to open all windows simultaneously. Universal remote control for RTV equipment operation, located e.g. in the living room allows also convenient operation of Z-Wave windows and accessories manufactured by FAKRO Company.

## Package content

- ❶ The FTP-V (FTU-V) Z-Wave window is equipped with the chain actuator, 60W power supply and rain sensor.
- ❷ Installation set for mounting the window in the roof.
- ❸ The ZWP10 remote control enables operation of the window directly after connection to 230V (channel [1], first group of buttons of movement).
- ❹ Fitting, programming and usage instructions of the FTP-V (FTU-V) window and the ZWP10 remote control.

**i** In order to use the remote control from the set to operate other Z-Wave products or change Z-Wave network settings please use NC851 programming and usage instructions of the remote control.

**i** Window actuator is factory programmed to the remote control on channel No. [1] to first group of buttons of movement. See NC851 instruction of the ZWP10 remote control.

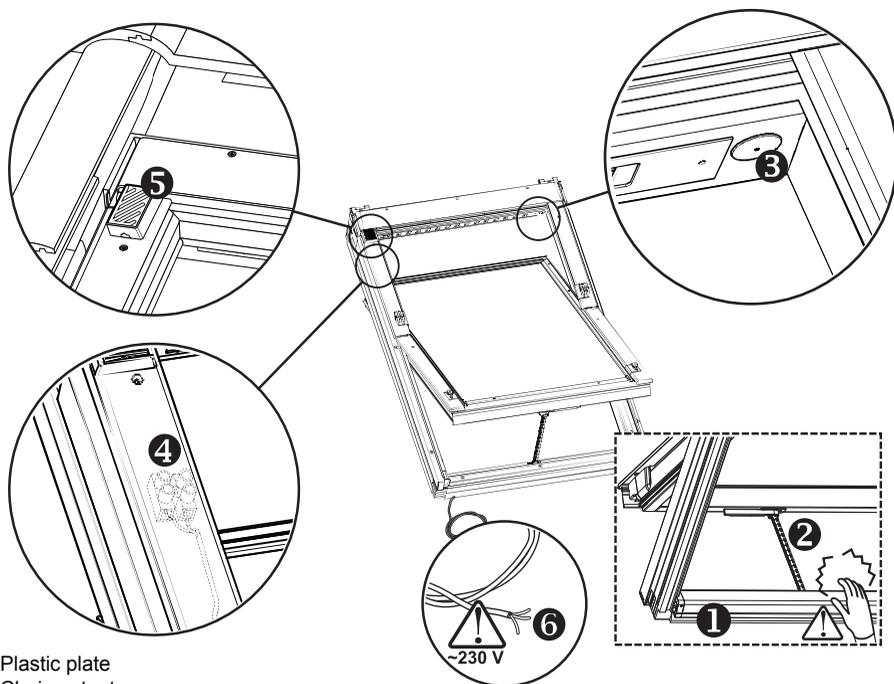


## Technical specification

<b>Power voltage</b>	230 [V] AC
<b>Rated power</b>	60 [W]
<b>Rated current</b>	0,26 [A]
<b>Standby current</b>	0,03 [A]
<b>Operating range (in the open space)</b>	up to 40 [m]
<b>Radio protocol</b>	Z-Wave
<b>Working frequency</b>	EU-868,42[MHz]; AS/NZ-921,42[MHz]; US/Canada-908,4[MHz]; RU-869[MHz]
<b>Current limiting</b>	YES
<b>Chain extension speed</b>	4,25 [mm/s]
<b>Chain pushing force</b>	250 [N]
<b>Closing force</b>	250 [N]
<b>Chain outreach</b>	240 [mm]
<b>Working temperature</b>	(-10°C) to (65°C)
<b>Power cable</b>	3 x 1,00 mm <sup>2</sup>

## Electric Z-Wave window

Below there is presented general view of the Z-Wave window. The power supply with connected actuator are positioned under the plastic plate **1**. Electric wires are run from the power supply to place of internal accessory connection **3** and to place of external accessory connection **4**. The actuator is equipped with bidirectional module of radio communication. For communication, Z-Wave protocol uses EU 868,42 MHz wave frequency. The actuator is equipped with the chain **2** characterized by the maximum extension of 24cm. The chain features special ending that allows to block it in the handle. The ZWP10 remote control is used to operate the Z-Wave window. In case of change of Z-Wave network configuration, see programming instructions of ZWP10 remote control. Programming of accessories connected to Z-Wave window is in programming instructions attached for particular device. The Z-Wave window is equipped as standard with the rain sensor and when the first rain drops appear, it sends command "close" to actuator, which closes the window. Install the rain sensor **5** in accordance with the fitting instructions of the window. If the roller shutter or awning blind is to be installed on the window, attach the rain sensor on the roller shutter or awning blind. After installation, connect the window to 230 VAC, cable 3x1mm<sup>2</sup> **6**.



- 1** Plastic plate
- 2** Chain actuator
- 3** Place of internal accessory connection
- 4** Place of external accessory connection
- 5** Rain sensor
- 6** Power cable 3x1,00 mm<sup>2</sup>

**⚠ WARNING! Danger of crashing. When closing the window, the actuator exerts the force of 250N (app. 25 kg)!**

**⚠ WARNING! If water appears on the rain sensor, the actuator automatically closes the window!**

**⚠ WARNING! Danger of electric shock!**

**Declaration of Conformity****Declaration of Conformity***in accordance with directive 2006/95/EEC*

We FAKRO Sp. z o.o., 144a Węgierska St. declare that the product:  
FTP-V, FTU-V Z-Wave:

- is compliant with the requirements of 2004/108/EEC directive concerning electromagnetic compatibility;
- is compliant with the requirements of 1999/5/EEC directive concerning radio devices and final telecommunication equipment and mutual recognition of their conformity;
- is compliant with the requirements of 2006/95/EEC directive concerning electric equipment designed for use within certain voltage limits;
- has been manufactured according to harmonized standards PN-EN 300220-2, PN-EN 301489-3, PN-EN 55014-1, PN-EN 55014-2, PN-EN 60335-2-97, PN-EN 60335-1;

The FTP-V, FTU-V Z-Wave is considered to be a machine that can be introduced to use only after installation performed according to installation and user instructions.

**FAKRO Sp. z o.o.** .....

(Michał Hajduga, Zarządzanie Produktami)

Nowy Sącz, dnia .....

**12 - 04 - 2010**



## 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 by an authorised individual, 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.

Quality certificate:

Device

Model .....

Serial Number .....

Seller .....

Address .....

Purchase date .....

.....

Signature (stamp) of installing person

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