

ARZ Komfort Z-Wave



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<http://www.fakro.com/download/film-installation-instructions/roof-windows/>

FAKRO Sp. z o.o.
ul. Węgierska 144A, 33-300 Nowy Sącz, PL
tel. +48 18 4440444, fax +48 18 4440333
www.fakro.com

ROLLER SHUTTER DESCRIPTION

The ARZ Komfort Z-Wave roller shutter is designed for installation on roof windows and suitable for cooperation with Z-Wave remote control system elements with frequency depending on part of the world.

The ARZ Komfort Z-Wave comes with the following protections:

- Electronic limit switch - when maximally unrolled or rolled up.

- Current limiting to provide protection against damage in the event of an obstacle or when running a snow-covered roller shutter at low temperature.

The functionality of the roller shutter allows the percentage read of the current position in the range of 0-100% by the controller with an indicator.

To operate the roller shutter, it is required to install it following the picture installation instructions included in the product packaging and assign to the Z-Wave controller. The controller* must be purchased separately.

TECHNICAL SPECIFICATION

Working temperature:

-20°C to + 85°C

Power voltage:

15V DC

Rated power:

20W

Power cable cross-section:

2x0.75mm²

Protection class:

III

Protection degree:

IP44

Radio reach:

up to 20 m in a building

Radio protocol:

Z-Wave Plus

Radio frequency:

EU – 868.4 MHz;

AS/NZ – 921.4 MHz;

US/Canada – 908.4 MHz;

RU – 869 MHz

(depending on version).

IMPORTANT INFORMATION

Please read carefully the instructions below before proceeding to product installation so as to prevent electric shock, injury, etc.

It is required to observe the following recommendations when installing electrically operated roller shutter:

- After unpacking, check the roller shutter elements for any signs of mechanical damage.

- Installation should be performed by a qualified person in accordance with manufacturer's instructions.

- Plastic containers used for packing should be stored out of children reach as they may be a potential source of danger.

- The roller shutter should be used according to its intended design. FAKRO shall not be responsible for any consequences being the result of improper roller shutter use.

- The roller shutter cannot be washed using solvent-based substances or open stream of water (do not immerse it in water).

- Any repairs of the roller shutter should be carried out by service authorised by the manufacturer.

- The roller shutter is intended for outdoor installation.

- In the event of adverse weather conditions (frost, snow) it may not be possible to operate the roller shutter.

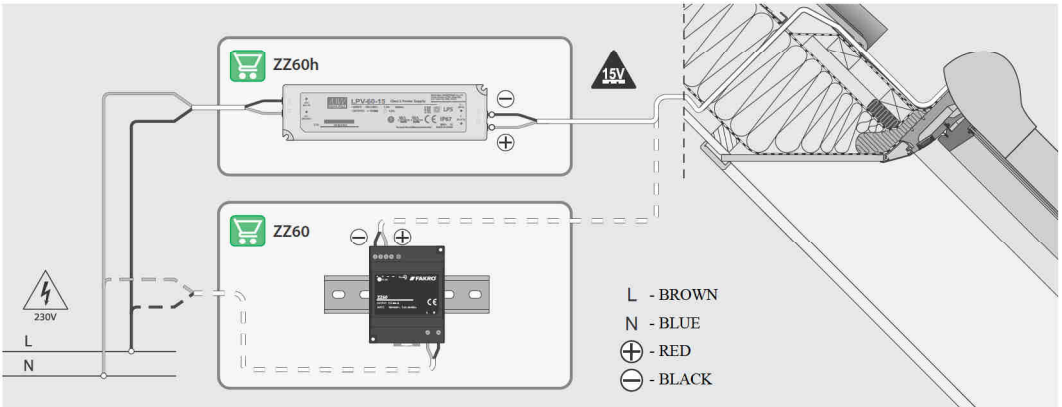
- The roller shutter has been factory calibrated. If, after some time, it is necessary to calibrate the roller shutter, it must be performed as described in the "MANUAL CALIBRATION" section



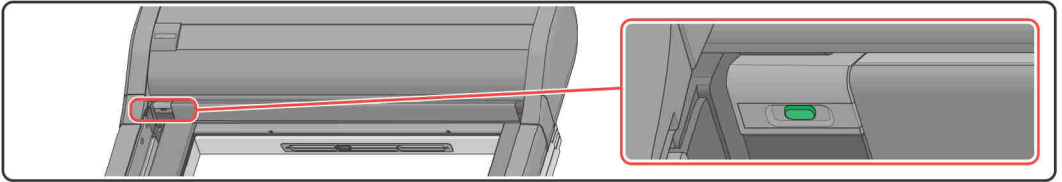
*CONTROLLER – Z-Wave device such as remote control, module, wall switch, internet gateway.

CONNECTION DIAGRAM

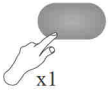
Connect the roller shutter to the ZZ60h or ZZ60 power supply unit according to the diagram below. A maximum of two roller shutters can be connected to one power supply unit. The power supply unit must be purchased separately.



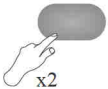
CONTROL PANEL



BASIC FUNCTIONS

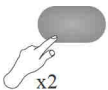


Press the button once.
Manual control.

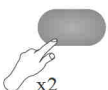


Press the button twice.
Programming.

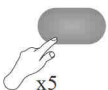
ADDITIONAL FUNCTIONS



Perform 3 times a double-click sequence on the button.
Restoring device parameters.
LED blinks 5 times.



Perform 5 times a double-click sequence on the button.
Device reset.
LED is on.



Press the button 5 times.
Device calibration.
LED blinks.



Green LED is on.
The device has not been added to the Z-Wave network.



Green LED blinks for 10 minutes.
The Autoinclusion function has been activated.



Green LED blinks quickly 5 times.
The device parameters have been restored.



Red LED is on.
The device is not calibrated.



Red LED blinks.
The device is in the calibration mode.



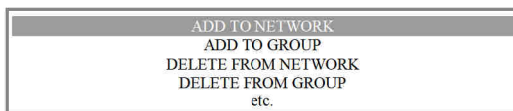
Red LED blinks once.
Reaching the upper end position.



Red LED blinks 3 times.
Overload.

PROGRAMMING

For programming information refer to the user manual of the controller which is to control the roller shutter.

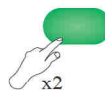


Run selected function on the Z-Wave controller.



METHOD 1*

The device is automatically entered into the programming mode – AUTOINCLUSION.
The device will be automatically added into the Z-Wave network.



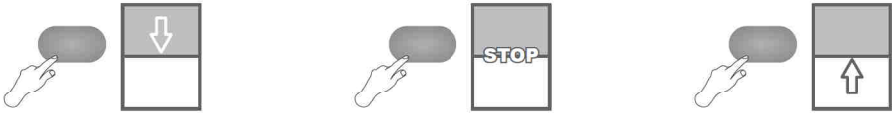
METHOD 2

Enter the device into the programming mode by pressing the button twice.



*It allows a hard-to-access device to be remotely added to the Z-Wave network without the need for pressing the P button. The Autoinclusion procedure is activated automatically after the Autoexclusion procedure is completed - see Z-WAVE CONFIGURATION PARAMETERS. The mode is active for a maximum of 10 minutes.

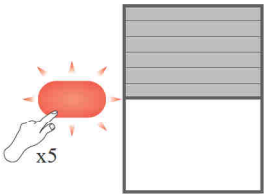
MANUAL CONTROL



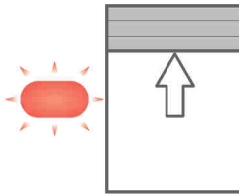
Control the device by pressing the button: 1. Start, 2. Stop, 3. Start in the opposite direction...

MANUAL CALIBRATION

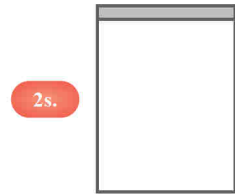
The roller shutter is factory calibrated. If necessary, the calibration process can be repeated. If the roller shutter is not calibrated, the control is possible only by holding the button.



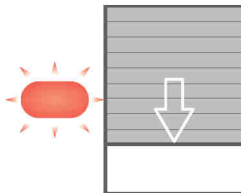
Press the button 5 times - red LED starts blinking.



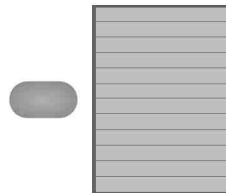
The roller shutter will make a short movement in the close direction and then it will open.



After reaching the end position red LED will be on for 2 seconds.



Then the roller shutter will automatically close.



After reaching the end position red LED will turn off.



It is possible to calibrate remotely using the Z-Wave controller. See the "ADDITIONAL INFORMATION" section.

ADDITIONAL INFORMATION

ALL ON / ALL OFF

Turning on this function makes it possible to control all devices simultaneously. It is available if supported by the controller.

Z-WAVE DEVICES COMPATIBILITY

The Z-Wave makes it possible to integrate devices of different manufacturers (lighting, heating, domestic automatic control, etc.). The Z-Wave devices operate as repeaters in the network which extends the communication range of radio waves.

This product is compatible with other certified Z-Wave devices. All battery-free devices of different manufacturers operating in one Z-Wave network can route through other devices, which can result in increased range.

Note: All information on adding devices to the Z-Wave network in controllers offered by other manufacturers can be found in user manuals of these products.

ASSOCIATION GROUPS

1. Life Line – group for reporting the position of the roller shutter after each stop and receiving information about the alarm (overload). A maximum of 1 device can be in the group.

2. Basic Repeat – group used for sending received commands of movement (BASIC SET) to devices belonging to this group. A maximum of 5 devices can be in the group.

3. Multilevel Repeat – group used for sending received commands (SWITCH MULTILEVEL SET, SWITCH MULTILEVEL START LEVEL CHANGE, SWITCH MULTILEVEL STOP LEVEL CHANGE) to devices belonging to these groups. A maximum of 5 devices can be in the group.

Z-WAVE PROCEDURE DESCRIPTION

Functions	Function description	LED signalling	
		MOTOR STATUS LED	Z-WAVE NETWORK STATUS LED
Autoinclusion	It allows a hard-to-access roller shutter to be remotely added to the Z-Wave network without the need for pressing the programming button. The Autoinclusion procedure is activated: - Automatically once the Autoexclusion procedure has been completed. This mode is active for a maximum of 10 minutes. - After connecting to the power supply when the roller shutter is not assigned to any network.	-	After: Blinking up to 10 minutes.
Inclusion	The roller shutter can be manually added to the Z-Wave network. Run the Inclusion function on the controller and then press the programming button on the roller shutter. This function is possible provided that the roller shutter is not assigned to the Z-Wave network.	-	Before: On. After: Off.
Association	The roller shutter can be added to the selected group in the controller by pressing the programming button.	-	-
Exclude	The roller shutter can be removed from the Z-Wave network. Run the Exclude procedure in the controller and then press the programming button on the roller shutter.	-	After: on
Delete	The roller shutter can be removed from the selected group of the controller. Run the Delete procedure in the controller and then press the programming button on the roller shutter.	-	-
Device Reset Locally	Perform 5 times a double-click sequence on the programming button. Device reset.	-	After: on
Parameter Reset Locally	Perform 3 times a double-click sequence on the programming button. Restoring device default parameters.	-	After: Blinking 5 times.

CALIBRATION

SEMI-AUTOMATIC REMOTE

The roller shutter calibrated using the controller.

1. Send parameter 12 with a value of 2 (red LED is on).
2. Send parameter 12 with a value of 1 (red LED blinks).

The roller shutter will make a short movement in the close direction and then it will open. Red LED will be on for 2 seconds after which it will continue to blink. The first position has been approved.

3. Hold the "down" button until the roller shutter is fully closed.
4. Press the "stop" button to confirm the lower end position (red LED will be on for 2 seconds and then turn off).

AUTOMATIC REMOTE

The roller shutter calibrated using the controller.

1. Send parameter 12 with a value of 2 (red LED is on).
2. Send parameter 12 with a value of 10 (red LED blinks).

The roller shutter will make a short movement in the close direction and then it will open. Red LED will be on for 2 seconds after which it will continue to blink and the roller shutter will automatically close. After reaching the lower end position red LED will be on for 2 seconds and then turn off.

SEMI-AUTOMATIC MANUAL

The roller shutter calibrated using the device.

1. Press the button 4 times (red LED blinks).

The roller shutter will make a short movement in the close direction and then it will open. Red LED will be on for 2 seconds after which it will continue to blink. The first position has been approved.

2. Hold the button until the roller shutter is fully closed.
3. Press the button twice (quickly) to confirm the lower end position (red LED will be on for 2 seconds and then turn off).

PROBLEMS & ERROR CODES

Power voltage	Error signalling
>16V	Movement locked in both directions. Signalling – green and red LEDs blinking twice simultaneously.
<11V	When trying to close (unroll) the roller shutter makes a short downward movement of about 5 cm and returns to the previous position. Signalling – red LED blinking twice three times at intervals of 2 seconds.
<10V	Movement locked in the close direction. Signalling – red LED blinking twice three times at intervals of 2 seconds.

Z-WAVE CONFIGURATION PARAMETERS

Parameter	Parameter no.	Value	Default value	SET (sending)	GET (querying)
Calibration	12	1 2 3	1	1 – calibration - entering mode after prior decalibration 2 – decalibration 3 – automatic calibration	1 – calibrated 2 – out of calibration 3 – defective encoders
Default parameters	99	1 2	1	1 – restore default parameters	1 – default parameters 2 – parameters other than default
Autoexclusion	100	2	-	2 – autoexclude	-

ALARMS & NOTIFICATIONS

Notification type	Event
Energy management	Overload
System	System device failure (defective encoders)

MANUFACTURER SPECIFIC REPORT

Parameter	Value
Manufacturer ID	0x0085
Product Type ID	0x0003
Product ID	0x0013

COMMAND CLASSES

Command Classes	Role	
	Support	Control
Command Class Z-Wave+ Info v2	ok	
Command Class Basic v1	ok	ok
Command Class Version v2	ok	
Command Class Manufacturer Specific v2	ok	
Command Class Device Reset Locally v1	ok	
Command Class Association v2	ok	
Command Class Association Group Info v1	ok	
Command Class Powerlevel v1	ok	
Command Class Switch Binary v1	ok	
Command Class Switch Multilevel v3	ok	ok
Command Class Switch All v1	ok	
Command Class Configuration v1	ok	
Command Class Notification v3	ok	
Command Class Node Naming v1	ok	
Command Class Battery	ok	

WARRANTY



PL

<https://www.fakro.pl/servis/gwarancja/>



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Producent:

FAKRO Sp. z o.o.

ul. Węgierska 144A, 33-300 Nowy Sącz, PL

tel. +48 18 4440444, fax +48 18 4440333

www.fakro.com

Quality certificate:

Device

Model

Serial number

Seller

Address

Purchase date

Invoice No.

Signature (stamp) of person installing a device

