

ARZ Z-Wave



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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.

The ARZ Z-Wave roller shutter is designed for installation with FAKRO roof windows and is suitable for cooperation with elements of the remote control provided by the Z-Wave system. The roller shutter ensures maximum comfort of using the attic space as well as controls the temperature and light access within the attic.

TECHNICAL SPECIFICATION

Working temperature:

-20°C to + 85°C

Power voltage:

15V DC

Rated power:

25W

Power cable cross-section:

2x0.75mm²

Protection class:

III

Protection degree:

IP44

Radio protocol:

Z-Wave Plus

Radio reach:

Up to 20m in a building

Radio frequency:

EU – 868.4 MHz;

AS/NZ – 921.42 MHz;

US/Canada – 908.4 MHz;

RU – 869 MHz

(depending on version).

IMPORTANT INFORMATION / SAFETY

1. After unpacking, check the roller shutter for its correct operation. Place the roller shutter in flat position and connect to the 15VDC power supply. The power supply must be purchased separately. Run the roller shutter using the manual control button.
2. Install the roller shutter according to the fitting instructions.
3. Connect the roller shutter to the low voltage system according to the diagram contained in this user manual. Installation should be carried out in accordance with manufacturer's instructions by a qualified professional. Check the correct operation with one cycle using the manual control button.
4. Add the roller shutter to the controller in accordance with the programming instructions supplied with the controller. The Z-Wave controller* must be purchased separately.
5. The roller shutter should be used according to its intended design.
6. In the event of adverse weather conditions (frost, snow) it may not be possible to operate the roller shutter.
7. The roller shutter is equipped with protections: mechanical limiting and current limiting to protect the roller shutter against damage in the event of an obstacle or when starting a snow-covered roller shutter at low temperature. The mechanical limiting protections of the roller shutter's armour are factory set.



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

ADDITIONAL INFORMATION

ALL ON / ALL OFF

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

Z-WAVE DEVICES COMPATIBILITY

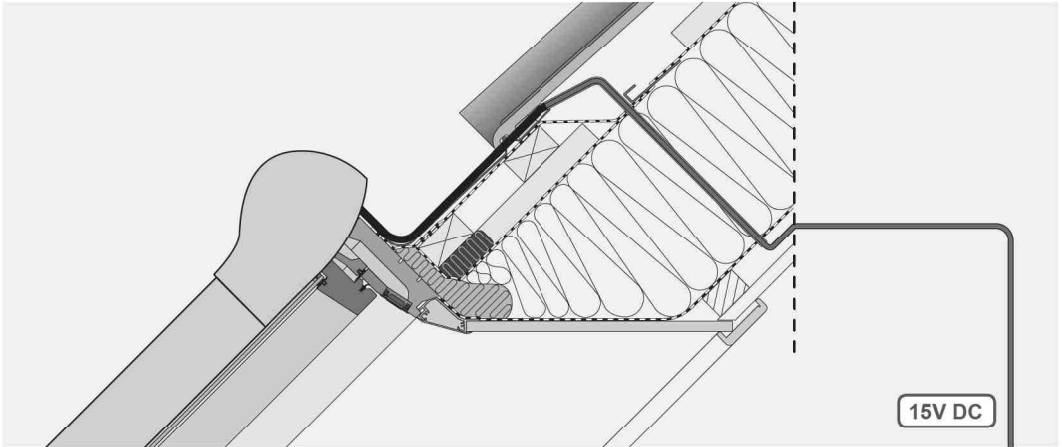
The Z-Wave makes it possible to integrate devices of different manufacturers (lighting, heating, domestic automatic control, etc.). The Z-Wave devices operate as repeaters in the network which extends the communication range of radio waves.

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

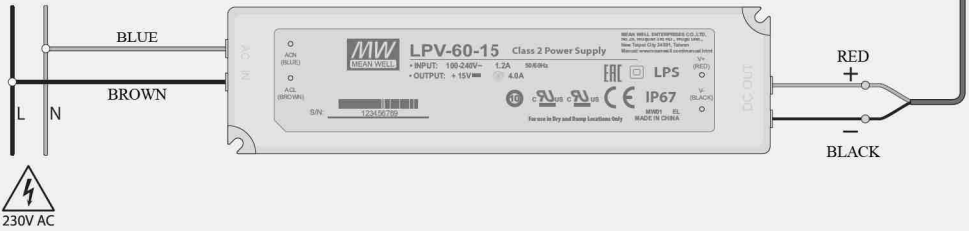
Note: All information on adding devices to the Z-Wave network in controllers offered by other manufacturers can be found in user manuals of these products.

WIRING DIAGRAM

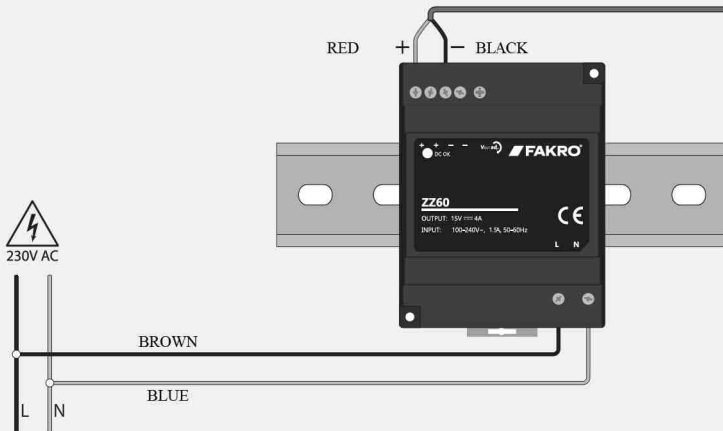
Connect the ARZ Z-Wave roller shutter to the ZZ60h or ZZ60 power supply according to the diagram below. A maximum of two ARZ Z-Wave roller shutters can be connected to one power supply.



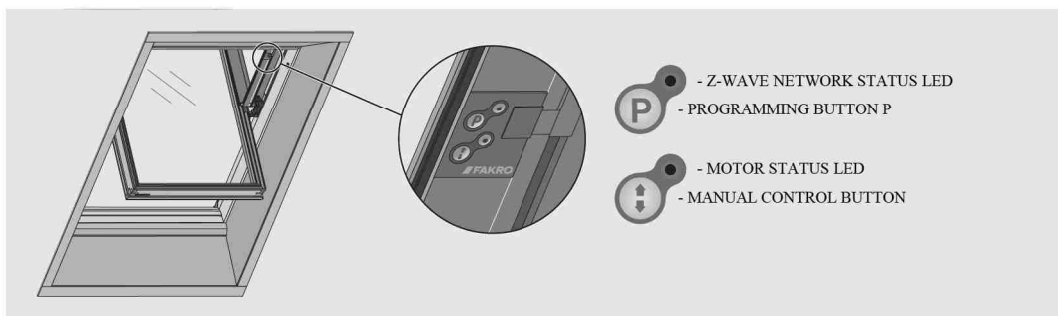
ZZ60h



ZZ60



CONTROL PANEL



Z-WAVE NETWORK STATUS SIGNALLING



The roller shutter in the Autoinclusion mode is ready to be remotely added to the Z-Wave network. Run the procedure of adding the device on the Z-Wave controller.



The roller shutter has been removed from the Z-Wave network. Remote control of the device is not possible.



Cause 1: The device is assigned to the Z-Wave network. Remote control of the device is possible.
Cause 2: No power supply or no connection to the source of power supply.

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 Autoinclusion procedure has been started.
The roller shutter will be automatically added to the Z-Wave network.



METHOD 2

Press the P button on the roller shutter.



*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. Each time the power is switched on, the roller shutter enters the Autoinclusion mode provided that it is not assigned to the Z-Wave network. The mode is active for up to 10 minutes.

MANUAL CONTROL



Control the roller shutter by pressing the manual control button. 1. Start, 2. Stop, 3. Start in the opposite direction...

ADVANCED INFORMATION

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	The roller shutter can be remotely added to the Z-Wave network. Each time the power supply is switched on, the roller shutter is entered into the Autoinclusion mode provided that it is not assigned to the Z-Wave network. This mode is active for 10 minutes. In order to add the device to the network, run the Add to Network function in the controller.	-	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 P 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. Pressing the P button enters the roller shutter into the Association mode provided that it is assigned to the Z-Wave network.	-	-
Exclude	The roller shutter can be removed from the Z-Wave network. Run the Exclude procedure in the controller and then press the P button on the roller shutter.	-	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 P button on the roller shutter.	-	-
Device Reset Locally	Information about the Z-Wave network can be removed from the roller shutter without using the controller. Quickly press 5 times the P button on the roller shutter.	-	On
Parameter Reset Locally	Default parameters of the roller shutter can be restored. Press 3 times the P button on the roller shutter.	-	Blinking 5 times

PROBLEMS & ENCODER ERRORS

Voltage during operation	Rolle shutter closing	Roller shutter opening
11V – 11,5V	LED blinking twice every 2 seconds.	LED blinking twice every 2 seconds.
<11V	The roller shutter stops after 5 seconds – LED blinking three times every two seconds and sending an alarm.	The roller shutter stops after 5 seconds – LED blinking three times every two seconds and sending an alarm.
Pre-start voltage	Roller shutter closing	Roller shutter opening
11V – 11,5V	Operation is not allowed – LED blinking twice and sending an alarm.	Operation is allowed – LED blinking twice every two seconds.
<11V	Operation is not allowed – LED blinking twice and sending an alarm.	Operation is allowed – the roller shutter stops after 5 seconds – LED blinking twice every two seconds and sending an alarm – the roller shutter can be opened in steps.
11V<	High voltage lock: If the supply voltage is higher than 16V, the controller blocks the possibility of starting the motor. This is indicated by the motor status LED blinking quickly twice which means ‘incorrect supply voltage’.	

Z-WAVE CONFIGURATION PARAMETERS

Parameter no.	Value	Default value	Size	Description
13	1 2	1	1	1 – FF go to maximum 2 – FF go to previous position
99	1 2	1	1	1 – restoring all parameters to factory settings. If there is 2 in the report, it means that one of the parameters has a value other than the default one
100	1 2	1	1	2 – autoexclude

ALARMS & NOTIFICATIONS

Notification type	Event
Energy management	Overload

MANUFACTURER SPECIFIC REPORT

Parameter	Value
Manufacturer ID	0x0085
Product Type ID	0x0003
Product ID	0x0111

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	

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.

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

