

- MOTORE DOPPIA RADIO PER AVVOLGIBILI CON FINECORSA ELETTRONICO
- DUAL RADIO MOTOR WITH ELECTRONIC LIMIT SWITCH FOR ROLLING SHUTTERS
  - DUAL-FUNKMOTOR FÜR ROLLLADEN MIT ELEKTRONISCHER ENDLAGENEINSTELLUNG
- MOTEUR À DOUBLE COMMANDE RADIO POUR VOLET ROULANT AVEC FINS DE COURSE ÉLECTRONIQUES
  - MOTOR RADIO DUAL PARA PERSIANA CON FIN DE CARRERA ELECTRÓNICO

ISTRUZIONI - INSTRUCTIONS - EINSTELLANLEITUNGEN INSTRUCTIONS - INSTRUCCIONES



# Table of contents:

	Motor installation: main stepsp.	31
	How to prepare the motorp.	32
	Electrical connectionsp.	33
	Compatible remote controlsp.	34
GLISH	Key to symbolsp.	35
	Command sequences examplep.	36
	Function open/close programming remote control p. 37	-38
	Setting the first remote controlp.	39
Z	Automatic disabling of the first remote control setting functionp.	39
ш	Adjustment of the limit switchesp.	39
	Setting in mode 1 ( <b>manual</b> )p.	39
	Example 1: Setting first the opening positionp.	
	Example 2: Setting first the closing positionp.	
	Mode 2: limit switch setting (semi-automatic)p.	
	Setting a middle positionp.	
	Deleting the middle positionp.	
	Closing force adjustmentp.	44
	Maximum closing force adjustment (100%)p.	44
	Total deleting of the limit switchesp.	
	Setting of additional remote controlsp.	45
	Remote control memory clearingp.	45
	Full memory clearingp.	46
	Special functions:	
	Short-term setting of a remote controlp.	47
	Setting the A530058 pocket remote controlp.	48
	Electric wiring to motor command for UP-DOWN mode	
	(2 independent up-down buttons)p.	49
	Command management from white wire	
	UP-STOP-DOWN-STOP / UP-DOWN / UP-DOWN "dead man"p.	
	Declaration of conformity	138

# Table of contents:

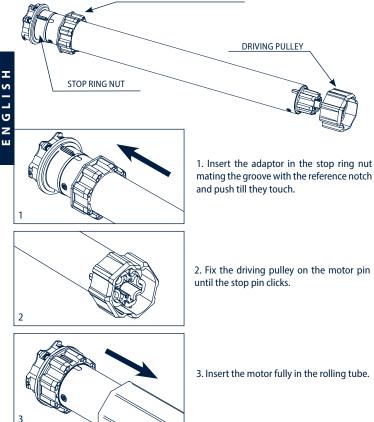
USING THE MOTOR INTO A WI-FI NETWORKp.	51	
Device descriptionp.	51	
Technical specificationp.	51	
Device installationp.	52	
Inclusion/exclusion the device into/from a WI-FI network (classic)p.	52	_
Including in the METAHome gatewayp.	53	I
Exclusion from METAHome gatewayp.	53	I S
Device controlp.	54	- 5
Controlling the motor by remote and external switchesp.	54	~
App-assisted Wi-Fi motor controlp.		
Reset to the factory settingsp.	56	

# **MOTOR INSTALLATION: MAIN STEPS**

- Installing the motor into the rolling shutter	p.	32
- Wired connections	p.	33
- Connecting the remote control	p.	39
- Setting the limit switches	p.	40
- Connecting to the Wi-Fi systemfrom	p.	51

### HOW TO PREPARE THE MOTOR

STOP RING NUT ADAPTOR



**NB:** If you use tubes with a round form, the driving pulley must be fixed to the tube, and the installation is to be paid by the person who installs the system. For other tube sections the fitting is optional, but strongly recommended.

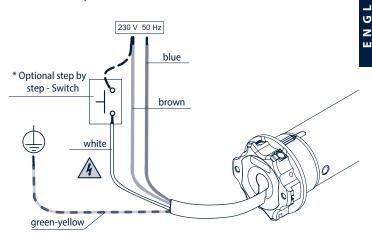
# **ELECTRICAL CONNECTIONS**

- In order to prevent dangerous situations or malfunctioning, the electrical command elements wired to the motor must be sized according to the motor's electrical features.
- Means for disconnection must be incorporated in the fixed wiring in accordance with the national installation standards.
- For outdoor use, provide the appliance with a supply cable with designation H05RN-F containing at least 2% of carbon.
- If not used, the white wire must be insulated. It is dangerous to touch the white wire when the motor is powered.

I

S

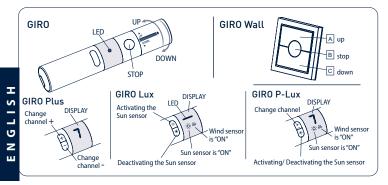
\_

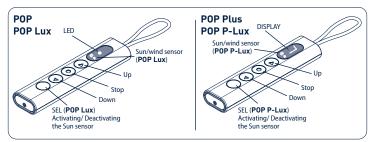


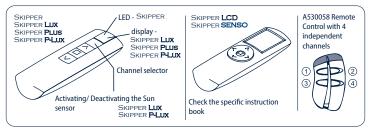
\* Installing this switch is optional. The connection can be done differently using the brown wire or the blue wire. The switch affords the possibility to command the motor in stepping mode (up, stop, down, stop, up, stop, down, stop..)



### **COMPATIBLE REMOTE CONTROLS**

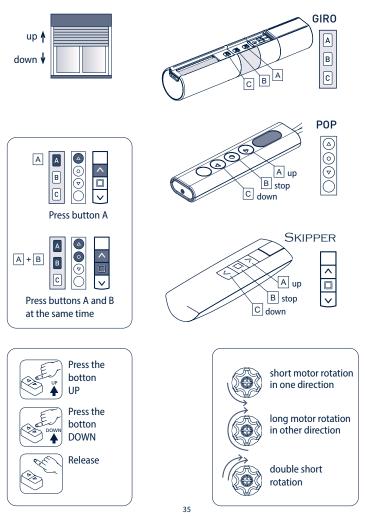








### **KEY TO SYMBOLS**



### **COMMAND SEQUENCES EXAMPLE**

Most of the command sequences have three distinct steps, at the end of which the motor indicates if the step has been concluded positively or not, by turning in different ways. This section is provided to demonstrate the motor indications. The buttons must be pressed as shown in the sequence, without taking more than 4 seconds between one step and the next. If more than 4 seconds are taken, the command is not accepted and the sequence must be repeated.

Command sequence example:

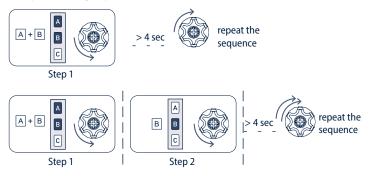
Т

S



As we can see from the example, when the sequence ends positively, the motor returns to its starting position in one long rotation. In fact, two short rotations in the same direction correspond to one long rotation in the opposite direction. The motor returns to the starting position even when the sequence is not completed; in this case by performing one or two short rotations.

Example of a wrong sequence:



# FUNCTION OPEN/CLOSE PROGRAMMING **REMOTE CONTROL SKIPPER PLUS - SKIPPER LUX - SKIPPER P-LUX REMOTE CONTROL POP PLUS - POP LUX - POP P-LUX**

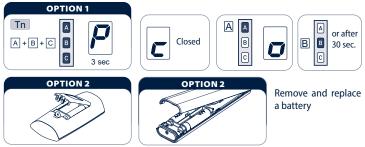
To prevent accidental changes to the programming of the motor during the daily use of the remote control, the possibility of programming is disabled automatically 8 hours after sending the last sequence (A+B or B+C).

CHECKING THE STATUS OF THE FUNCTION



To change the status of the function, see the sequences "ENABLE/DISABLE PROGRAMMING"

### **FNABLE PROGRAMMING**



Proceed with programming as the instructions booklet.

### DISABLE PROGRAMMING



# FUNCTION OPEN/CLOSE PROGRAMMING REMOTE CONTROL SKIPPER - SERIES GIRO - REMOTE CONTROL POP

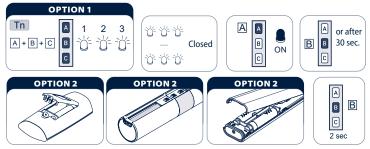
To prevent accidental changes to the programming of the motor during the daily use of the remote control, the possibility of programming is disabled automatically 8 hours after sending the last sequence (A+B or B+C).

### CHECKING THE STATUS OF THE FUNCTION



To change the status of the function, see the sequences "ENABLE/DISABLE PROGRAMMING".

### ENABLE PROGRAMMING



Remove one battery and wait minimum 5 seconds or press any button.

Proceed with programming as the instructions booklet.

### DISABLE PROGRAMMING



# SETTING THE FIRST REMOTE CONTROL

This operation can only be performed when the motor is new, or after a total delete of the memory.

### During this step, power up only one motor at time!

### T1: First remote control to be set



### AUTOMATIC DISABLING OF THE FIRST REMOTE CONTROL SETTING FUNCTION

Every time you connect the power supply to the motor, you have 3 hours to store the first remote control. After this time, the ability to store the remote control is disabled. To reset the timer of the function you have to disconnect and reconnect the power supply to the motor.

# ADJUSTMENT OF THE LIMIT SWITCHES

OPEN WRX tubular motors have an electronic limit switch system with an encoder. This system ensures great reliability and precision in keeping the positions. Limit switch regulation is performed simply with the remote control. During setting, the motor moves only as long as the up or down button is pressed, stopping when the button is released. At the end of setting, press either the up or down button briefly to move the motor. The adjustments of the limit switches can be done in different modes depending on whether the rolling shutter is equipped with lockdown hangers or physical stops.

# SETTING IN MODE 1 (manual)

In this mode it doesn't matter whether or not the rolling shutter has got physical stops in the opening position and the lockdown hangers in the closing position. It is possible to choose whether to set the upper limit or the lower limit first. The correct rotation direction will only be identified after the first position is set so it is sometimes necessary to use the "up" or "down" button.

Т

S

# **EXAMPLE 1:** Setting first the opening position

# SETTING THE OPENING POSITION

### If the rolling shutter is completely open, you have first to drive it down by around 20 cm.

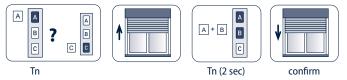
Hold the button A or C pressed and drive the rolling shutter to the opening position. With physical stops: press button A or C until the motor stops automatically.

Without physical stops: use the button A or C to drive the rolling shutter to the necessary opening position.

To set the opening position, press buttons A (up) and B (stop) simultaneously for about 2 seconds, until the motor automatically performs a short "down" movement.

This move is the visual confirmation of the setting operation.

Tn: Already programmed remote control



# SETTING THE CLOSING POSITION

Pressing now the button C, drive completely down the rolling shutter to the closing position. With lockdown hangers: press button C until the motor stops automatically.

Without lockdown hangers: use the button A or C to drive the rolling shutter to the necessary closing position.

To set the closing position, press buttons B (stop) and C (down) simultaneously for about 2 seconds, until the motor automatically performs a short "up" movement. This move is the visual confirmation of the setting operation.

Tn: Already programmed remote control







Tn (2 sec)

# EXAMPLE 2: Setting first the closing position

# SETTING THE CLOSING POSITION

# If the rolling shutter is completely closed, you have first to drive it up by around 20 cm.

Hold the button A or C pressed and drive the rolling shutter to the closing position. With lockdown hangers: press buttons A or C until the motor stops automatically. Without lock down hangers: use the button A or C to drive the rolling shutter to the necessary closing position.

To set the closing position, press buttons B (stop) and C (down) simultaneously for about 2 seconds, until the motor performs automatically a short "up" movement. This move is the visual confirmation of the setting operation.

Tn: Already programmed remote control



# SETTING THE OPENING POSITION

Pressing now button A, drive completely up the rolling shutter to the opening position. **With physical stops:** press button A until the motor stops automatically.

Without physical stops: use the button A or C to drive the rolling shutter to the necessary opening position.

To set the opening position, press buttons A (up) and B (stop) simultaneously for about 2 seconds, until the motor automatically performs a short "down" movement. This move is the visual confirmation of the setting operation.

Tn: Already programmed remote control







Tn (2 sec)

## **MODE 2: LIMIT SWITCH SETTING (semi-automatic)**

To do the settings in this mode the rolling shutter has to be equipped with lockdown hangers in the closing position, but the rolling shutter does not need to have physical stops in the opening position. This mode of setting is helpful in cases where the factory will set the opening position and the closing position will be set automatically during the normal use.

In this mode, it's necessary to set first the opening position!! (Rolling shutter open!)

### SETTING THE OPENING POSITION

If the shutter is already completely open, you have first to drive it down by about 20 cm.

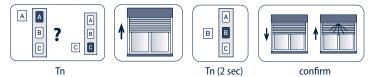
Press button A or C and drive the rolling shutter to the opening position.

With physical stops: press button A or C until the motor stops automatically.

Without physical stops: use buttons A and C to drive the rolling shutter to the necessary opening position.

To set the opening position, press button B (stop) for about 2 seconds, until the motor performs a short downwards movement. After this confirmation movement the motor brings back the rolling shutter to the opening position.

Tn: Already programmed remote control



Now the drive direction is detected and the motor can be disconnected from the power. The closing position will be set automatically during the normal use. When the motor is powered up again, the remote control can be used normally. The lower limit switch position will be set automatically the first time the rolling shutter stops automatically in the closing position using the lock down hangers. As the motor looks for a "mechanical" stop during each way down, if the Obstacle Recognition finds something is blocking the way (such as a protruding screw in the guide rails), it is necessary to raise the shutter again, remove the obstacle and to drive the motor back to the closing position to set the limit.

### SETTING A MIDDLE POSITION

This function allows the rolling shutter to be set at a favourite middle position. When this middle position is memorized, you just press the stop button for 2 seconds and automatically the motor will move the shutter to this position.

To memorize the middle position, move the rolling shutter to the desired position and then hold the STOP button down (for about 2 sec) until the motor gives confirmation.

Tn: Already programmed remote control







### MOVEMENT TO MIDDLE POSITION

It's possible to control the motor in the middle position in two ways:

Tn (4 sec)



or



### Tn (2 sec)



If you want to delete the middle position, it can be done as described below. To change this position, it's also necessary to delete first the memorized middle position. Before deleting it's necessary to drive the motor to the middle position (by pressing button B for 2 seconds), then press again button B (stop) for about 4 seconds until the motor confirms the operation by a longer movement.

Tn: Already programmed remote control









Tn (2 sec)

Tn (4 sec)

# **CLOSING FORCE ADJUSTMENT**









Tn

This system is the only one of its kind and it guarantees that rolling shutters (which are equipped with lockdown hangers) remain perfectly closed without any danger of the slats suffering excessive pressure. The system works in all kinds of applications because of the opportunity of manually adjusting the closing force.



2 sec

The OPEN WRX is factory set to a closing force of 20 % of the nominal torque. This force can be changed very easily by the remote control. It can be reduced by 10 % or increased up to 40 %, depending on the desired result.

# **MAXIMUM CLOSING FORCE ADJUSTMENT (100%)**

A close attention on activating this function is recommended, excessive closing force may damage the rolling shutters.

By activating this function the motor will apply its maximum nominal torque, (e.g. 100% of 50 Nm = 50 Nm).

Tn: Already programmed remote control





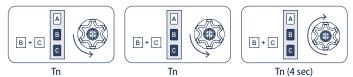




2 sec

# TOTAL DELETING OF THE LIMIT SWITCHES

Tn: Already programmed remote control



**NB:** by deleting the limit switches, the setting of the closing force is maintained.

# SETTING OF ADDITIONAL REMOTE CONTROLS

Up to 15 remote controls can be set.

Tn: Already programmed remote control Tx: Additional remote control



# REMOTE CONTROL MEMORY CLEARING

It is possible to delete singly all the memorized remote controls. When the last one is deleted the motor initial condition is restored. The same applies to the single channels of a multichannel remote control: just select the channel to cancel before performing the sequence.

Tn: Remote control to be cleared



Tn (2 sec)

# FULL MEMORY CLEARING

### This full memory clearing does not delete the setting of the limit switch.

The full memory clearing can be performed in two ways: 1) WITH THE REMOTE CONTROL

### Tn: Already programmed remote control



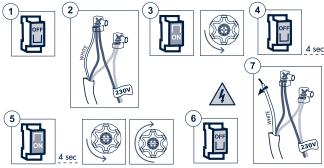
### 2) WITH THE WHITE WIRE

ш

Do this operation only in case of emergency, if all remote controls are no longer operating. To delete the memory we have to access the white wire of the motor. The sequence of this operation is the following:

- 1) Disconnect the power supply from the motor, via the main switch for example.
- 2) Connect the white motor wire to the brown wire (phase) or to the blue wire (neutral).
- 3) Connect the power supply to the motor, which rotates briefly in one direction.
- 4) Disconnect the power supply from the motor for at least 4 seconds.
- 5) Connect the power supply to the motor which performs one brief rotation in one direction after around 4 seconds and then a longer one in the opposite direction.
- 6) Disconnect the power supply from the motor.
- 7) Separate the white wire from the brow/blue wire. Insulate the white wire, in an appropriate way, before reconnecting the power supply.

At this point it is possible to proceed with the setting of the first remote control.



### **SPECIAL FUNCTIONS**

# SHORT-TERM SETTING OF A REMOTE CONTROL

This function makes it possible to store a remote control temporarily, for example, with the purpose of setting the limit switches during assembly in the factory. A later final saving of the remote control will be possible using the appropriate command sequence (see: "SETTING THE FIRST REMOTE CONTROL"). The operations described below can be carried out only when the motor has just come out of the factory or after a full memory clearing (see: "FULL MEMORY CLEARING"). The motor makes the following operations possible only within the time limits described in order to make sure that the short-term setting is used only in the installation or factory setting phase and not during daily use. Power up the motor, make sure that no other motors having an empty memory are powered up in the same operating range.

Within 30 seconds after start, press the B and C buttons simultaneously until the motor gives a confirmation signal.

**The remote control will remain stored for 5 minutes,** while the motor is powered up. After 5 minutes or when the motor has its power cut off, the remote control will be cancelled.

T1: First remote control to be set



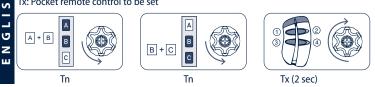
### SETTING THE A530058 POCKET REMOTE CONTROL

NB: The new pocket remote control can be set only after programming of a previous remote control as the traditional Cherubini remote controls (Skipper, Giro or POP - 3 buttons Up-Down-Stop remote control).

### HOW TO PROCEED TO SET THE BUTTON ON THE POCKET REMOTE CONTROL

Tn: Already programmed remote control Tx: Pocket remote control to be set

Т



After to have pressed for minimal 2 seconds one of the 4 buttons on the pocket remote control, this one will be memorized on the step-by-step mode (UP-STOP-DOWN-STOP). The following buttons will be not memorized and have to be done with previous described sequence, and could be used to move additional Tronic RX motors.

### DELETING ONE BUTTON ON THE POCKET REMOTE CONTROL

The buttons saved may be deleted individually according to the following sequence:

Tn: Already programmed remote control Tx: Pocket remote control with button to be deleted



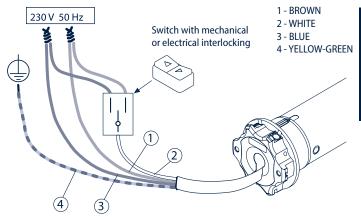
To confirm the operation the motor will do a short shunt and the button, which has to be pressed for minimal 2 second, will be deleted.

# ENGLISH

# ELECTRIC WIRING TO MOTOR COMMAND FOR UP-DOWN MODE (2 independent UP-DOWN buttons)

To connect the switch, use only kind of switches with mechanical or electrical interlock, to prevent to press both buttons at same time.

The motor automatically recognizes the switch-type (with 1 or 2 buttons) and sets the proper operational mode.



From white wire it's possible to control the motor in the middle position:

press UP long (> 2 s):



or use the short UP sequence (< 0,5 s) - short DOWN (< 0,5 s)



Using the switch as described on this page it's possible to set the motor trough the white wire (WIRE PROGRAMMING).

To find out this procedure, require the instruction pamphlet from your dealer.

### COMMAND MANAGEMENT FROM WHITE WIRE UP-STOP-DOWN-STOP / UP-DOWN / UP-DOWN "DEAD MAN"

NB: The default function provided in the motors leaving the factory is UP-STOP-DOWN-STOP for singular UP/DOWN button switch. (Not for the switch with two independent UP-DOWN buttons!)

PROCEDURE TO CHANGE THE CONTROL MODE:

Tn: Already programmed remote control



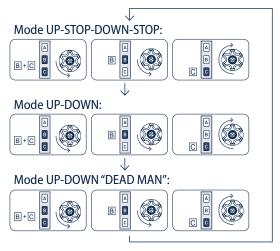
The possible settings are 3 and are available in the following order:

- UP-STOP-DOWN-STOP (factory setting)

- UP-DOWN (for 2 independent buttons)

- UP-DOWN "DEAD MAN" (for 2 independent buttons)

To switch from one setting to the following, perform the sequence as many times as necessary to reach the desired setting.



### **USING THE MOTOR INTO A WI-FI NETWORK**

### **DEVICE DESCRIPTION**

OPEN WRX is a rolling shutters motor with programmable limit switches, dual-radio control and wired control option.

The dual radio control allows easy and interactive adjustment of limit switches and main functions, as well as integration into a Wi-Fi network.

The wired control option provides for both programming and motor control, from a simple switch, as an addition or as an alternative to the radio remote control. This product operates in any Wi-Fi 2.4 GHz. network.

### TECHNICAL SPECIFICATION

Power supply230 VAC ±10% 50 HzOperating temperatureFrom -10° to 40° CPower consumption in stand-by<1W</td>Radio frequency WI-FI2.4 GHzRadio frequency CRC433,92 MHzComplianceCE, RoHsElectrical IP RatingIP44

### DEVICE INSTALLATION

- 1) Carry out motor preparation and installation on the rolling shutter
- 2) Wire up the electrical connections
- 3) Program the limit switches and the adjustments as described in the product installation manual.
- 4) Include the device in the Wi-Fi network

It is advisable to carry out all the preparation, installation and adjustment operations before including the motor in the Wi-Fi network. Although it is possible to include the motor in a Wi-Fi network, most features will not be active until the limit switches are adjusted. In particular, the following are not active:

- Movements control and position reporting
- Notifications sending J

Т

S

Z

These limitations are necessary to limit the possibility of damage to the rolling shutter, as well as to protect the safety of the installer. ш

# INCLUSION/EXCLUSION THE DEVICE INTO/FROM A WI-FI NETWORK (classic)

OPEN WRX is compatible with METAHome gateways and all Wi-Fi 2.4 GHz compatible routers.

### INCLUDING IN THE METAHome GATEWAY

Make sure that the motor is powered. To carry out the inclusion, make sure that the motor is not already included in a Wi-Fi network; if it is already included, to be able to include it again, you must first perform a reset following the procedure described in the section 'Restoring the factory settings'.

To include the device, access the METAHome gateway using the Meta app and perform the following steps:

- 1. Click the '+' button in the top right-hand corner
- 2. Select Wi-Fi and then 'Add device'.
- The screen to acquire the device using its QR code will open; if you do not have a QR code, click 'I do not have a QR code' and then select the device from the list that appears.
- 4. After a few moments, the available Wi-Fi networks will be displayed; select the one you want to connect your device to.
- 5. Enter and confirm the Wi-Fi network password.
- 6. At the end of the inclusion, click on the 'Finish' button to return to the Dashboard, where you will see the device you have just connected.



### **EXCLUSION FROM METAHome GATEWAY**

To exclude the device, access the METAHome gateway from the Meta application and follow the steps below:

- 1. Click on the '+' button in the top right corner.
- 2. Select Wi-Fi and then 'Remove Device'.
- 3. Select the device you want to remove from the list and confirm your selection.

# **DEVICE CONTROL**

### CONTROLLING THE MOTOR BY REMOTE AND EXTERNAL SWITCHES

OPEN WRX can be controlled by radio remote control and by wired button.

When installing the motor on the rolling shutter, the radio remote control is extremely useful to set the limit switches and perform all programming. After the first installation, the remote control can still be used as a local control point. All information regarding compatible devices and programming methods are described in the product installation manual.

- From the remote control, you can execute the basic commands:
- Closing the rolling shutter: press and release the UP button
- Opening the rolling shutter: press and release the DOWN button
- Stop the rolling shutter: press and release the STOP button.

OPEN WRX can also be controlled by a wired button, both single and a double-action (up/down).

With the single action button, the operation is as follows:

- Each time the button is pressed/released, the motor will perform the following operations in sequence: Closing, Stopping, Opening, Stopping and so on.

With the double-action button:

- Closing the rolling shutter: press and release the DOWN button
- Opening the rolling shutter: press and release the UP button
- Stop the rolling shutter: press and release the UP or DOWN button while the motor is moving.

Factory default setting:

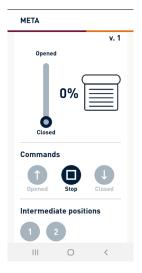
- No remote control is associated with the motor. The motor can be controlled via a wired button, but until the limit switches are set, it moves in 'dead man' mode: when the button is released, the motor stops.
- As long as the limit switches are not set, the direction of movement of the motor may be reversed, compared to the remote control and the wired double-action button. The direction is correctly identified automatically by the motor itself when the limit switches are set and cannot be changed.

Further information about the operation of the remote control and the wired button can be found in the product installation manual.

### APP-ASSISTED WI-FI MOTOR CONTROL

OPEN WRX can be included in any 2.4 GHz Wi-Fi network.

The figure below shows how the device will appear once it is included in the META app.



The UP/DOWN/STOP buttons in the control panel allow to Open/Close/Stop the rolling shutter.

Using the slider it is possible to set the opening level of the rolling shutter.

The device status is updated in case of status change.

# **RESET TO THE FACTORY SETTINGS**

The Wi-Fi configuration of the ORA WRX motor can be reset to the original factory values with the following programming sequence:

1) From the remote control: AB - AC - BC (4 seconds), wait for confirmation movements to be executed.



- From the button (if the end stops are not adjusted, you can use either sequence indifferently):
  - a. With the motor on the high limit switch: UP-UP-UP-DOWN-UP-DOWN



### b. With the motor on the low limit switch: DOWN-DOWN-UP-DOWN-UP



### **π** DICHIARAZIONE DI CONFORMITÀ UE

CE CHERUBINI S.p.A. dichiara che il prodotto è conforme alle pertinenti normative di armonizzazione dell'Unione:

Direttiva 2014/53/UE, Direttiva 2011/65/UE.

Il testo completo della dichiarazione di conformità UE è disponibile facendone richiesta sul sito: www.cherubini.it.

### **EN EU DECLARATION OF CONFORMITY**

CE CHERUBINI S.p.A. declares that the product is in conformity with the relevant Union harmonisation legislation: Directive 2014/53/EU, Directive 2011/65/EU. The full text of the EU declaration of conformity is available upon request at the following website: www.cherubini.it.

### **DE** EU-KONFORMITÄTSERKLÄRUNG

CE CHERUBINI S.p.A. erklärt der produkt erfüllt die einschlägigen Harmonisierungsrechtsvorschriften der Union: Richtlinie 2014/53/EU. Richtlinie 2011/65/EU.

Der vollständige Text der EU-Konformitätserklärung kann unter unserer Web-Seite www.cherubini.it, gefragt werden.

### FR DÉCLARATION UE DE CONFORMITÉ

CE CHERUBINI S.p.A. déclare que le produit est conforme à la législation d'harmonisation de l'Union applicable:

Directive 2014/53/UE, Directive 2011/65/UE.

Le texte complet de la déclaration UE de conformité est disponible en faisant requête sur le site internet: www.cherubini.it.

### ES DECLARACIÓN UE DE CONFORMIDAD

CE CHERUBINI S.p.A. declara que el producto es conforme con la legislación de armonización pertinente de la Unión:

Directiva 2014/53/UE, Directiva 2011/65/UE.

El texto completo de la declaración UE de conformidad puede ser solicitado en: www.cherubini.it.



### CHERUBINI S.p.A.

Via Adige 55 25081 Bedizzole (BS) - Italy Tel. +39 030 6872.039 info@cherubini.it | www.cherubini.it

### CHERUBINI Iberia S.L.

Avda. Unión Europea 11-H Apdo. 283 - P. I. El Castillo 03630 Sax Alicante - Spain Tel. +34 (0) 966 967 504 info@cherubini.es

### CHERUBINI France SAS

ZI Du Mas Barbet 165 Impasse Ampère 30600 Vauvert - France Tél. +33 (0) 466 77 88 58 info@cherubini.fr | www.cherubini.fr

### CHERUBINI Deutschland GmbH

Rotter Viehtrift 4A - 53842 Troisdorf - Deutschland Tel. +49 (0) 224 126 699 74 | Fax +49 (0) 224 126 699 73 info@cherubini-group.de | www.cherubini-group.de Rev: 01 11/2024 - Cod: A4516\_6U13