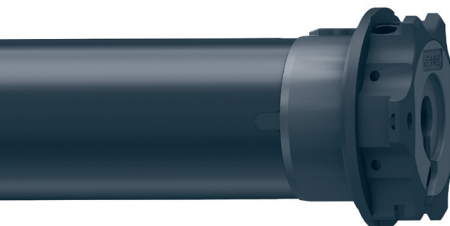


CHERUBINI

PLUG&PLAY PLUS



TUBULAR MOTOR WITH MANUAL OR AUTOMATIC
ADJUSTMENT OF THE ELECTRONIC LIMIT SWITCH

EN

TRANSLATION OF THE ORIGINAL INSTRUCTIONS

Table of contents

Electrical connections	4
How to prepare the motor	5
Key to symbols	6
Command sequences example	6
Limit switch setting	7
Limit switch learning in automatic mode	7
Limit switch setting in manual mode	8
Procedure for limit switch setting in manual mode	8
Example 1: Setting as first the upper limit switch	8
Example 2: Setting as first the lower limit switch	9
Limit switch setting in mixed mode	9
Changing limit switches	10
Deleting of single limit switch positions	10
Deleting of all limit switch positions	10
Motor actions on stop upon limit switches and obstacle	11
Restoring the original configuration	11

**EU DECLARATION OF CONFORMITY**

CHERUBINI S.p.A. declares that the product is in conformity with the relevant Union harmonisation legislation:

Directive 2014/35/EU

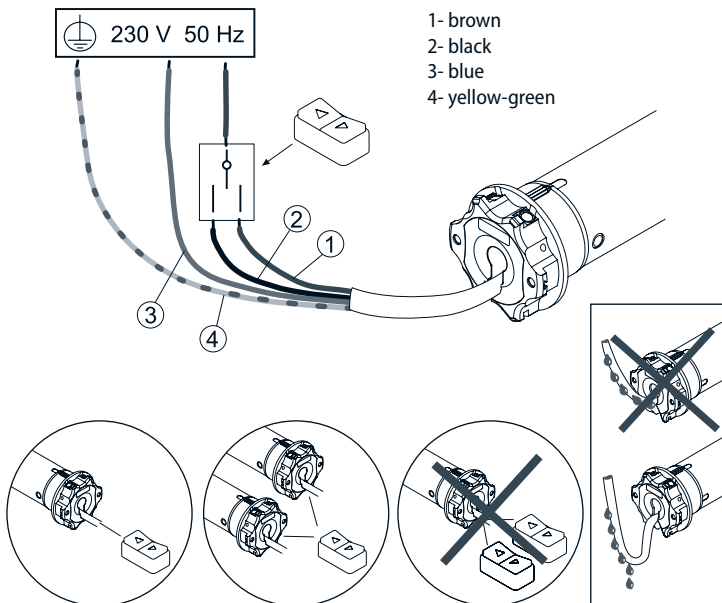
Directive 2014/30/EU

Directive 2011/65/EU

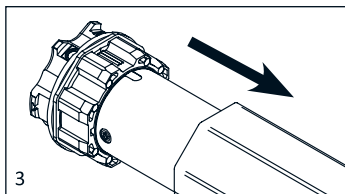
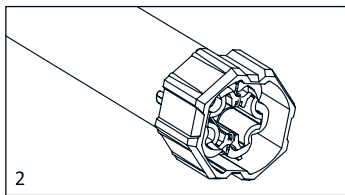
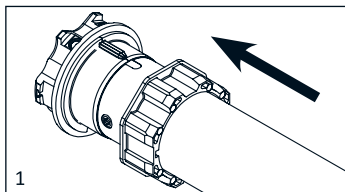
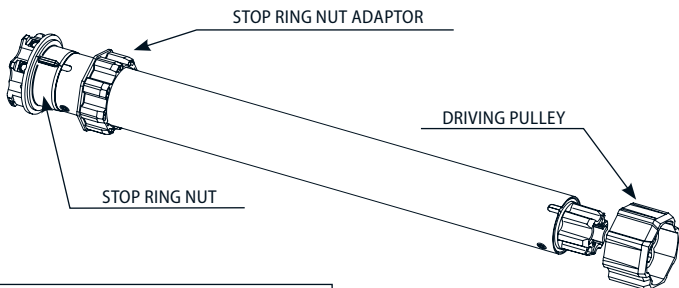
The full text of the EU declaration of conformity is available upon request at the following website: www.cherubini-group.com.

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.
- The selectors inverting the direction of rotation of the motor must be provided with mechanical interlocking.
- Invert the brown and the black conductor to change the direction of rotation.
- **NEVER** connect two or more selectors to the same motor.
- For outdoor use, provide the appliance with a supply cable with designation H05RN-F containing at least 2% of carbon.
- The cable between the motor and the control switch must not exceed 50 m. For cable lengths over 50 m, an interface relay has to be used.



HOW TO PREPARE THE MOTOR

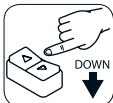


NB: If you use tubes with a round form, the driving pulley must be fixed to the tube, and the installation is to be paid by the person who installs the system. For other tube sections the fitting is optional, but strongly recommended.

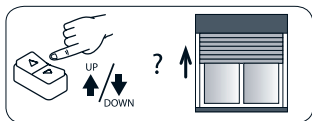
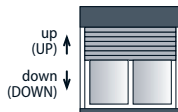
KEY TO SYMBOLS



press the UP-button



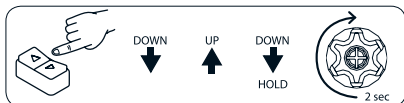
press the DOWN-button



press the up or down button to raise the rolling shutter



motor rotation to confirm



press the buttons as indicated in rapid sequence and hold the button down at the step marked by "HOLD", to check the motor confirmation movement

COMMAND SEQUENCES EXAMPLE

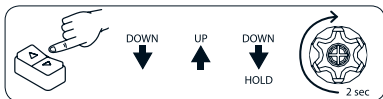
Most of the command sequences have three or six distinct steps.

The buttons should be pressed quickly (< 0.5 sec) as indicated in the sequence.

The time interval between each step should not be more than 1 second, otherwise the command sequence will be cancelled.

To receive confirmation that the sequence has been accepted by the motor, the button must be held down at the final step marked by HOLD.

Command sequence example:



Attention! If the sequence requires a repetition of the same commands (Up+Up/Down+Down), an interposition of the Stop position could be necessary depending on the type of switch in use.

LIMIT SWITCH SETTING

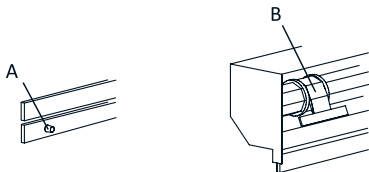
The motor can learn the limit switches in different modes: automatic, manual, mixed.

It is suggested that the strength of the rolling shutter, its couplings and its safety lugs be checked.

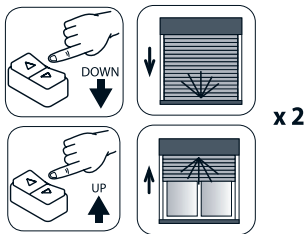
As long as both of the limit switch positions have not been learned, the motor will move briefly, stop and then start back up again.

LIMIT SWITCH LEARNING IN AUTOMATIC MODE

To learn the limit switches in automatic mode, the rolling shutter must have either internal or external safety lugs (A).



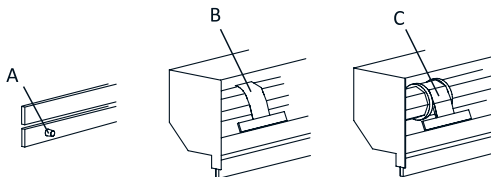
Run two ascending and descending complete cycles until the motor full stop in the limit switch and the pull is released.



LIMIT SWITCH SETTING IN MANUAL MODE

Learning the limit switches in manual mode is required for rolling shutters that do not have either internal or external safety lugs (A).

Either flexible (B) or rigid (C) ribs may be used for the connection to the tube.



PROCEDURE FOR LIMIT SWITCH SETTING IN MANUAL MODE

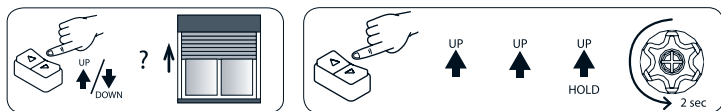
Depending on your individual needs, it's possible to learn first either the upper or the lower limit switch.

Example 1: Setting as first the upper limit switch

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

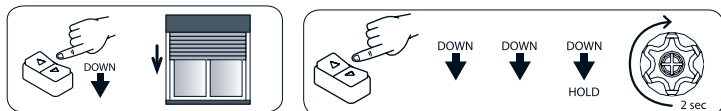
Using the button switch, drive the rolling shutter to the desired open position.

To memorise the open position, perform the indicated sequence of commands (UP-UP-UP) with the button you want to associate with the up movement.



Using the down button of the button switch, drive the rolling shutter to the desired closed position.

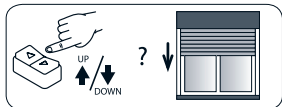
To memorise the closed position, perform the indicated sequence of commands (DOWN-DOWN-DOWN).



Example 2: Setting as first the lower limit switch

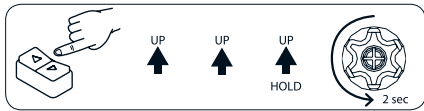
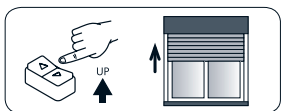
If the rolling shutter is already completely down, you have first to drive it up by around 20 cm.

Using the button switch, drive the rolling shutter to the desired closed position. To memorise the closed position, perform the indicated sequence of commands (DOWN-DOWN-DOWN) with the button you want to associate with the down movement.



Using the up button of the button switch, drive the rolling shutter to the desired open position.

To memorise the open position, perform the indicated sequence of commands (UP-UP-UP).



LIMIT SWITCH SETTING IN MIXED MODE

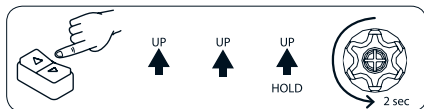
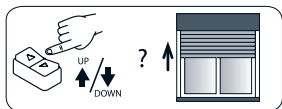
Where required, the limit switch positions can be set in mixed mode.

Example:

Setting as first the upper limit switch in manual mode and the lower limit switch in automatic mode

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

Using the button switch, drive the rolling shutter to the desired open position. To memorise the open position, perform the indicated sequence of commands (UP-UP-UP) with the button you want to associate with the up movement.



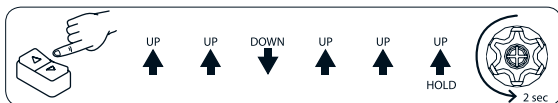
Using the down button of the button switch, drive the rolling shutter to the completely closed position twice, allowing the motor to automatically detect the limit switch.

CHANGING LIMIT SWITCHES

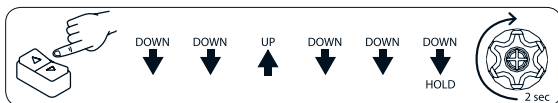
The following command sequences may be performed only after the limit switches have been learned and only when the motor is completely on one of the two limit switch positions: either lower or upper limit positions.

DELETING OF SINGLE LIMIT SWITCH POSITIONS

Deleting the UPPER limit switch starting from the OPEN POSITION

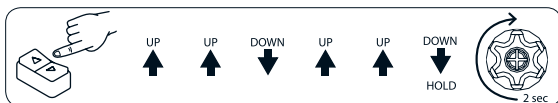


Deleting the LOWER limit switch starting from the CLOSED POSITION

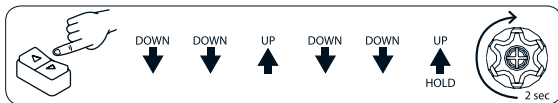


DELETING OF ALL LIMIT SWITCH POSITIONS

Deleting both limit switch positions starting from the OPEN POSITION



Deleting both limit switch positions starting from the CLOSED POSITION



Deleting of one or both limit switches is indicated by the motor pausing briefly before moving again until both limit switch positions have been memorised again in automatic or manual mode.

MOTOR ACTIONS ON STOP UPON LIMIT SWITCHES AND OBSTACLE

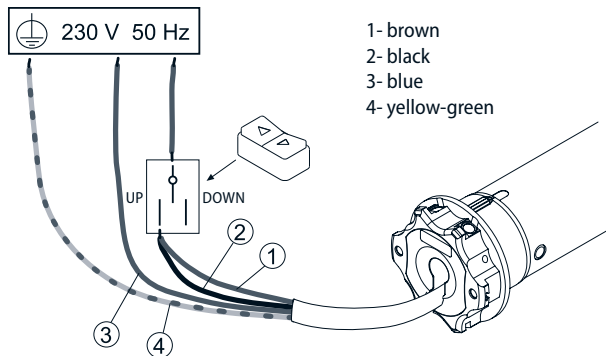
	LIMIT SWITCH STOPS (rolling shutters with stoppers and/or stiff fixing springs)	OBSTACLE DETECTION DURING MOVEMENT (only when descending for rolling shutters with stiff fixing springs)
Plug&Play Plus	Normally stops a few mm before touching the stop. Occasionally, it goes to the stop and then slightly reverses itself to decrease the force.	It stops and slightly reverses itself to decrease the force.

RESTORING THE ORIGINAL CONFIGURATION

NB: restoring the original configuration will delete the limit switches.

To restore the original motor configuration perform the procedure as described below:

- Connect both the brown and black motor wires under the same switch, e.g. UP;



- Press the UP button for at least 10 seconds until the resetting confirmation movement:



- Disconnect and then restore the original control switch electrical connections (see page 4).

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