## CHERUBINI

## WAVE WIRE



MOTORE TUBOLARE CON REGOLAZIONE MANUALE DEL FINECORSA ELETTRONICO PER TENDE DA SOLE E SCREEN

TUBULAR MOTOR WITH MANUAL ADJUSTMENT OF THE ELECTRONIC LIMIT SWITCH FOR AWNINGS AND SCREENS

ROHRMOTOR MIT MANUELLER EINSTELLUNG DER ELEKTRONISCHEN ENDLAGEN ZU MARKISEN UND SCREENS

MOTEUR TUBULAIRE AVEC RÉGLAGE MANUEL DES FINS DE COURSE ÉLECTRONIQUES POUR STORES ET SCREENS

MOTOR TUBULAR CON REGULACIÓN MANUAL DEL FIN DE CARRERA ELECTRONICO PARA TOLDO Y SCREEN

## ES

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## 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.it.

## ELECTRICAL CONNECTIONS

- To prevent any danger or malfunction, the size of electrical control components connected to the motor must be compatible with the electrical features of the motor.
- 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 cord with designation H05RN-F containing at least 2\% of carbon.
- Cable length between motor and control-switch maximal 50 m . In case of cable length more than 50 m an interface-relay have to be used.



## HOW TO PREPARE THE MOTOR



1. Insert the adaptor in the stop ring nut mating the groove with the reference notch and push till they touch.

2. Fix the driving pulley on the motor pin until the stop pin clicks.

3. Insert the motor fully in the rolling tube.

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


Press and hold down the button


Motor rotation to confirm

Press the up or down button to raise the awning


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.

## COMAND SEQUENCES EXAMPLE

Most of the command sequences have three or six distinct steps.
The buttons should be pressed quickly ( $<0.5 \mathrm{sec}$ ) 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 in 3 steps:


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 only in manual mode.
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.

## PROCEDURE FOR LIMIT SWITCH SETTING

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

## EXAMPLE 1:

## SETTING THE UPPER LIMIT SWITCH AS FIRST POSITION

If the awning is already completely closed up, it must be first opened out to about 20 cm , then proceed as follows.
Using the button switch, bring the awning up to the desired position (for cassetteawnings, hold the button pressed until the motor stops automatically on the closing position).
To set the upper limit switch position perform the indicated sequence of commands (UP-UP-UP) with the button to be linked to the ascent.


Using the button to be linked to descent bring the awning down to the desired position. To set the lower limit switch position perform the indicated sequence of commands (DOWN-DOWN-DOWN).


## EXAMPLE 2:

## SETTING THE LOWER LIMIT SWITCH AS FIRST POSITION

If the awning is already completely lowered, it must be first raised about 20 cm , then proceed as follows.
Using the button switch, bring the awning down to the desired position.
To set the lower limit switch position perform the indicated sequence of commands (DOWN-DOWN-DOWN) with the button to be linked to descent.


Using the button to be linked to ascent bring the awning up to the desired position (for cassette-awnings, hold the button pressed until the motor stops automatically on the closing position).
To set the upper limit switch position perform the indicated sequence of commands (UP-UP-UP).


## CHANGING LIMIT SWITCHES

The following command sequences may be performed only after the limit switches have been set and only when the motor is in one of the two limit switch positions.

## DELETING OF SINGLE LIMIT SWITCH POSITIONS

Deleting of the UPPER limit switch.
Take the awning to the upper limit switch and perform the sequence:


UP


Deleting of the LOWER limit switch.
Take the awning to the lower limit switch and perform the sequence:


## DELETING OF ALL LIMIT SWITCH POSITIONS

From the UPPER position


From the LOWER 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.

PLEASE NOTE: Total cancellation of limit switches involves disabling supersensitivity. The obstacle detection force adjustment is preserved (page 22).

## ACTIVATION AND ADJUSTMENT OF THE SUPER-SENSITIVITY - only for motors with a final torque up to 25 Nm -

The super-sensitivity feature for obstacles when descending may be enabled on three levels only after both limit switches have been set.
From the UPPER position


From the LOWER position


To complete activation of the super-sensitivity, run the awning through a complete cycle of opening and closing.

## DEACTIVATION SUPER-SENSITIVITY FUNCTION

From the UPPER position


From the LOWER position


# OBSTACLE DETECTION FORCE ADJUSTMENT <br> - only for motors with a final torque above 25 Nm - 

The obstacle detection force is factory-set at $40 \%$ of the motor's nominal torque and can be adjusted by increasing it to $70 \%$ or decreasing it to $20 \%$ tusing the procedures below.

From the UPPER position


From the LOWER position


## 100\% OBSTACLE DETECTION FORCE ADJUSTMENT

- only for motors with a final torque above 25 Nm -

For special applications, the obstacle detection torque and closing force can be increased up to $100 \%$ of the nominal value.

From the UPPER position


From the LOWER position


## MOTOR ACTIONS ON STOP UPON LIMIT SWITCHES AND OBSTACLE

|  | OBSTACLE DETECTION |  |  |
| :--- | :--- | :--- | :--- |
| ASCENDING | DESCENDING | LIMIT SWITCH <br> STOPS |  |
| Up to 25 Nm <br> (without supersensivity <br> activated) | Stop without reverse movement |  |  |
| Up to 25 Nm <br> (with supersensivity <br> activated) | Stop without <br> reverse movement | Stop with <br> reverse safety <br> movement | Stop without <br> reverse movement |
| Above 25 Nm | Stop without reverse movement |  |  |

## RESTORING THE ORIGINAL CONFIGURATION

PLEASE NOTE: recovery of the default configuration will delete the limit switches and la disabilitazione della supersensibilità. The obstacle detection force adjustment is preserved (page 22).

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 2 seconds.
- Disconnect and then restore the original control switch electrical connections (see page 15).


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