



# TUBULAR MOTOR MR INSTALLATION AND OPERATING INSTRUCTIONS

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## 01. SAFETY GUIDE

- MOBILUS M35 MR, M45 MR rotatable tubular motor is used in automatic operation of roller blinders, grates, gates and awning.
- After removing the device form the box, check if it is free form any visible damages made in transportation for instance. If such damages have been found, it is crucial to instantly inform the supplier about it. Do not install device.
- Improper installation may lead to personal injury. This is why it is important to proceed according to the manual hereto. It is also important to keep it for reference.
- Do not let children play with the remote control of the tubular motor.
- Check regularly the technical condition of the tubular motor. Do not use if requires repair or maintenance.
- Tubular motor must not be used by persons (including children) who have limited physical, psychical ability or feeling disorder, or persons with no experience or knowledge about the device unless under the supervision or according to users manual provided by persons responsible for the safety of the tubular motor.
- MOBILUS M35 MR, M45 MR tubular motor shall be supplied by 230V~, 50Hz. Connection shall be performed by licensed electrician in accordance with attached electrical schemes and regulations in force.
- COSMO remote wall holder shall be installed in visible location away from movable elements, on 1,5m form the ground. COSMO remote must also be kept away form movable elements.
- Tubular motor electrical installations must be equipped with safety disconnection devices.

## **02. INITIAL REMARKS**

- Do montażu siłowników serii MOBILUS M35 MR i M45 MR wykorzystuje się standardowe uchwyty serii M35 i M45. Instalację w rolecie i regulację wyłączników krańcowych siłowników serii M35 MR i M45 MR należy wykonać wg "Instrukcji montażu i użytkowania siłowników standardowych serii M35 MI i M45 M".
- Siłowniki serii MOBILUS MR mogą współpracować ze wszystkimi pilotami serii COSMO/2WAY / COSMO.
- Do jednego siłownika serii MOBILUS MR można wczytać maksymalnie 8 różnych pilotów ( kanałów w przypadku pilotów wielokanałowych ).
- Zasięg sterowania radiowego ograniczony jest przez przepisy dotyczące maksymalnej mocy pilotów oraz warunki zabudowy urządzeń. Projektując rozmieszczenie pilotów należy uwzględnić ograniczenie zasięgu do około 25 m przez 2 ściany.

## Deklaracja zgodności:

Deklarujemy z pełną odpowiedzialnością, że siłowniki serii MOBILUS M35 MR i M45 MR spełniają następujące Dyrektywy Europejskie:

- 1. 2014/53/UE Dyrektywa Radiowa RED
- 2014/30/UE Dyrektywa Kompatybilności Elektromagnetycznej
- 73/23/EWG LV Directive
- 4. 2006/42/EC Dyrektywa Maszynowa

Deklarujemy z pełną odpowiedzialnością, że piloty serii MOBILUS COSMO | H1, COSMO | H5, COSMO | W1, COSMO | W5, COSMO | G spełniają następujące Dyrektywy Europejskie:

- 1. 2014/53/UE Dyrektywa Radiowa RED.
- 2014/30/UE Dyrektywa Kompatybilności Elektromagnetycznej.

UWAGA! Nie należy programować pilota kiedy roleta znajduje się w skrajnej pozycji (górnej lub dolnej). Każde programowanie i zmiana kierunków obrotów siłownika potwierdzane jest przez dwa mikro ruchy jego zabieraka. Niezastosowanie się do tych wytycznych grozi uszkodzeniem rolety (wciągnięciem do obudowy).

03. ENTERING THE MASTER PROGRAMMING MODE

ATTENTION The first remote (or a channel in the case of multi-channel remotes) loaded into the receiver's memory is the MASTER remote. It allows you to operate the tubular motors and to program subsequent pilots.

- 1. Connect the power supply according to the diagram.
- Turn OFF and ON the power supply of the tubular motor twice. One noticeable, audible sequence of micro movements down / up of the driver confirms the tubular motor entering the PROGRAMMING MODE – Fig. 3.1a.







- 1. Enter the MR tubular motor in the PROGRAMMING MODE Fig. 4.1a.
- Press and hold STOP and UP for more than 1 second on the emitter. Drive shall make two micro-turns and confirming MASTER read in and tubular motor shall switch to work mode.
   Fig. 4.1b.

Now you can operate the tubular motor or program another remote by means of the MASTER.

ATTENTION In case of multichannel remote (COSMO | HTC, | H5, | W7, | WT9, | HM, | HB, | H24, | L5, | G3+ ) use the available buttans to select the channel which is to be the MASTER channel.







Fig. 4.2

TIPP For convenience it is recommended that each tubular motor has its own separate MASTER remotes (separate channel in case of multichannel remote). Avoid situations where several tubular motors shall have one common MASTER remote (common channel).



05. PROGRAMMING OF THE SECOND AND EACH SUBSEQUENT REMOTE

- Press and simultaneously hold, on MASTER remote control, STOP and UP buttons for more than 5 seconds until drive makes two micro-turns confirming entering into the programming mode. - Fig. 5.1a.
- On second remote or channel which we wish to program (in case of multichannel remote) press and simultaneously hold, STOP and UP buttons for more than 1 second until drive makes two micro-turns.- Fig. 5.1b.
- 3. Adding another remote / channel repeat point 2.



### Fig. 5.1

ATTENTION We can start programming another remote. If within 20 seconds none of the procedures shall be commenced – tubular motor shall return to it's work mode. It is also possible to switch to work mode manually by means of the MASTER. To switch to work mode manually press and hold STOP and UP buttons for more than 5 seconds. In both cases the return to work mode shall be confirmed by two micro-turns of the drive. - Fig. 5.1 c

06. THE CHANGE OH THE DIRECTION OF THE WORK OF TUBULAR MOTOR

- If you press the UP button on the remote control and the shutter goes DOWN, change the direction of rotation of the drive. To do this, simultaneously press and hold:
   a) remotes COSMO | HM, | HB, | G3+, | WT9, | WT buttons STOP and DOWN - Fig. 6.1b;
   b) remotes COSMO | HT, | H2A, | H1, | H5, | G, | W1, | W7 buttons DOWN and UP - Fig. 6.1c;
   c) remote COSMO | HCT buttons UP and F3; - Fig. 6.1d;
- until the drive performs one sequence of micro down / up movements.
- 2. Sprawdź poprawność działania przycisków GÓRA /DÓŁ. Fig. 6.1e;





## Fig. 6.1

07. DELETING CODES FROM ALL REMOTE CONTROLS FROM THE MEMORY OF TUBULAR MOTOR

- Enter the MR tubular motor in the PROGRAMMING MODE Fig.7.1a; until the drive performs one sequence of micro down / up movements
- On optional remote, which we wish to program as MASTER, press and simultaneously hold STOP and UP buttons for more than 5 seconds. This remote becomes the MASTER remote and all other remote controls shall be deleted form the memory of the tubular motor. The drive makes two micro-turns confirming the operation. - Fig. 7.1b;



Fig. 7.1

ATTENTION MASTER can only be deleted replacing it with a new one.

08. DELETING CODES FROM ALL REMOTE CONTROLS FROM THE MEMORY OF TUBULAR MOTOR

There is a possibility to delete only one of the programmed remote controls. To do so you must:



- Fig. 8.1
- Press and simultaneously hold, on MASTER remote control, STOP and UP buttons for more than 5 seconds until drive makes two micro-turns confirming entering into THE PROGRAM-MING MODE - Fig. 8.1a.
- Press and hold STOP and UP for more than 1 second on the remote (channel) we wish to delete. Drive shall make two micro-turns and the code of the remote (channel) shall be deleted form the memory of the tubular motor.

ATTENTION If within 20 seconds none of the procedures shall be commenced – tubular motor shall return to it's work mode.

## **09. POWER SUPPLU SCHEME**



# **10. BI-DIRECTIONAL COMMUNICATION, SIGNAL REPEATER FUNCTION**

Tubular motors with a built-in radio system also have the following functionality: BI-DIRECTIONAL COMMUNICATION - allows the exchange of information between the tubular motor and the remote control. Depending on the model of the radio controller, the user may obtain more or less extensive messages (location of the shutter, encounter of obstacles, etc.). Bi-directional communication is enabled at the factary and does not require any action on the part of the user. SIGNAL REPEATER - this function makes it possible to extend the range of radio control. The tubular motor with the repeater function enabled receives signals from the controller or tubular motor and transmits them further by amplifying it. Thanks to this, the farthest located receivers, not being in the range of the controller, can receive and transmit information via indirectly actuated tubular motors. Enabling the function:

- 1. Enter the tubular motor in the PROGRAMMING MODE.
- On the remote control, press the sequence of buttons: UP, STOP, DOWN, UP, STOP, DOWN. Activation of the repeater function will result in three sequences of micro movements by the tubular motor. Deactivation of the repeater function will result in 2 micro movements by the tubular motor.

WARNING! The signal repeater function should be turned on only in devices that are on the limit of signal range. Due to the effective work, we recommend turning on the signal repeater function in up to three devices in the facility. Unjustified activation of the signal repeater function in many devices may cause interference in all radio devices.

# 11. SETTING OF THE LIMIT SWITCHES

In order to set the appropriate operating range of the tubular motor, one must set the limit switches. This is done with the limit switch knobs located on the tubular motor head (Fig. 15.2). The direction of rotation of a given knob is indicated by an arrow next to the knob.

Turning the knob towards ,+" increases the number of turns in a given direction of tubular motor movement, while turning towards ,-" reduces.



## 12. LOWER POSITION SETTINGS

Lower the shutter towards the lower position. Then turn the knob corresponding to the direction of rotation of the tubular motor when lowering towards ,+" until the desired lower shutter position is obtained. The revolutions can be corrected by turning the knob towards ,-".

## **13. UPPER POSITION SETTINGS**

Raise the shutter near the top position. Then turn the knob corresponding to the direction of rotation of the tubular motor when lifting, towards "+" until the desired position of the upper shutter is obtained. The revolutions can be corrected by turning the knob towards "".

## 14. WARNINGS

- Approaching to the moving curtain is not allowed till it is completely closed.
- Special caution must be taken by manual emergency service because the open curtain can suddenly fall down due to the weak or broken hangers.
- Switching on the awnings is not allowed if near around takes place the maintenance of the building (e.x. washing the windows).
- Disconnecting of the tubular motor's supply of the automatic awning is demanded if near around takes place the maintenance of the building (e.x.washingthewindows).
- The minimum horizontal distance of 0,4m between completely unrolled awning and any object is demanded.
- WARNING!!! The use of long control cables, runin parallel with the power supply cables, may
  result in incorrect operation of the actuators due to the induction of voltage in the control lines.
  If you use control cables longer than those used in the factory, please contact the technical
  department of Mobilus Motor Sp. z .o.

The technical data of the tubular motor are given on its data plate.

The minimal pipe diameter in which the installation of the tubular motor is possible is 40 mm.



### **15. ENVIRONMENTAL PROTECTION**



This appliance is marked according to the European Directive on Waste Electrical and Electronic Equipment (2002/96/EC) and further amendments. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate wa- ste handling of this product. The symbol on the product, or the documents accompanying the product, indicates that this appliance may not be treated as household waste. It shall be handed over to the applicable collection point for the waste electrical and electronic equipment for recycling purpose. For more information about recycling of this product, purchased the product.