EN

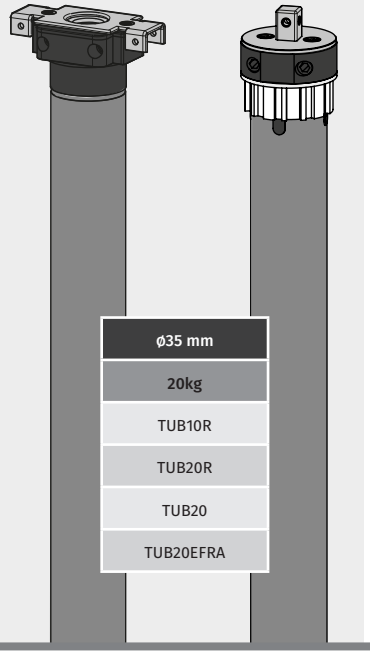
TUB

USER/INSTALLER MANUAL

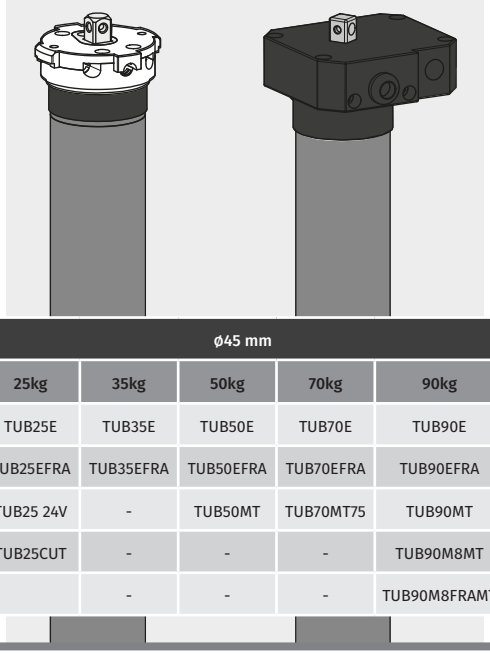
Motorline® PROFESSIONAL

PORTUGAL

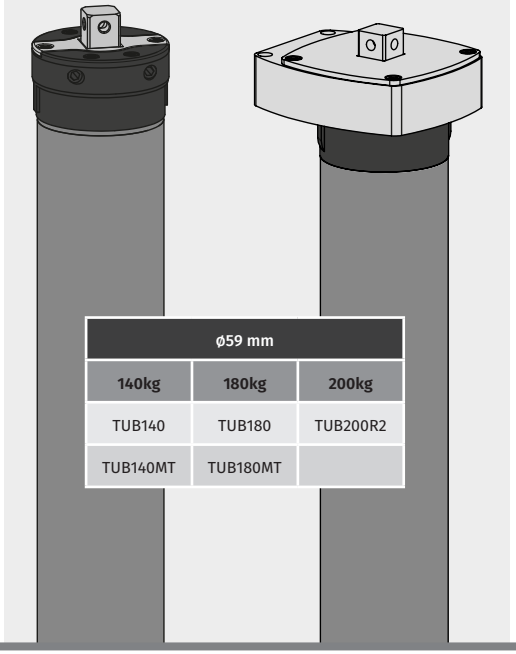
v6.8
REV. 10/2025



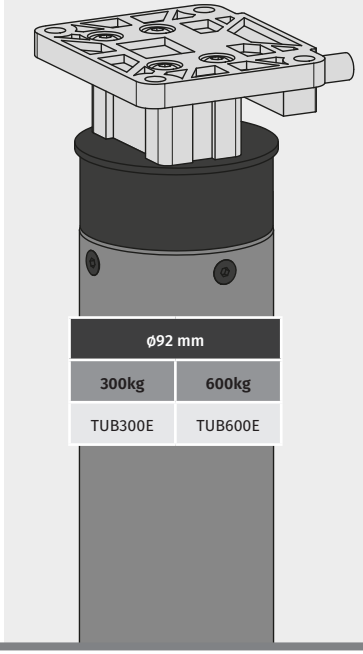
ø35 mm
20kg
TUB10R
TUB20R
TUB20
TUB20EFRA



ø45 mm				
25kg	35kg	50kg	70kg	90kg
TUB25E	TUB35E	TUB50E	TUB70E	TUB90E
TUB25EFRA	TUB35EFRA	TUB50EFRA	TUB70EFRA	TUB90EFRA
TUB25 24V	-	TUB50MT	TUB70MT75	TUB90MT
TUB25CUT	-	-	-	TUB90M8MT
	-	-	-	TUB90M8FRAMT



ø59 mm		
140kg	180kg	200kg
TUB140	TUB180	TUB200R2
TUB140MT	TUB180MT	



ø92 mm	
300kg	600kg
TUB300E	TUB600E

00. CONTENT

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Simplified EU Declaration of Conformity

The undersigned ***MOTORLINE ELECTROCELOS, S.A., with registered Travessa do Sobreiro, n.º 29, 4755-474 Rio Côvo (Santa Eugénia), Barcelos***, declares that the present type of radio equipment - **Tubular motor: TUB20EFRA, TUB35EFRA, TUB50EFRA, TUB70EFRA, TUB90EFRA, TUB90 M8 FRA MT** - complies with the Directive 2014/53/EU.

The full text of the declaration of conformity is available at the following internet address:

https://motorline.pt/certification/tub-efra

01. SAFETY INSTRUCTIONS

CE	This product is certified in accordance with European Community (EC) safety standards.
RoHS	This product complies with Directive 2011/65/EU of the European Parliament and of the Council, of 8 June 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment and with Delegated Directive (EU) 2015/863 from Commission.
	(Applicable in countries with recycling systems). This marking on the product or literature indicates that the product and electronic accessories (eg. Charger, USB cable, electronic material, controls, etc.) should not be disposed of as other household waste at the end of its useful life. To avoid possible harm to the environment or human health resulting from the uncontrolled disposal of waste, separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Home users should contact the dealer where they purchased this product or the National Environment Agency for details on where and how they can take these items for environmentally safe recycling. Business users should contact their vendor and check the terms and conditions of the purchase agreement. This product and its electronic accessories should not be mixed with other commercial waste.
	This marking indicates that batteries should not be discarded like other household waste at the end of their useful life. Batteries must be delivered to selective collection points for recycling.
	The different types of packaging (cardboard, plastic, etc.) must be subject to selective collection for recycling. Separate packaging and recycle it responsibly.
	This marking indicates that the product and electronic accessories (eg. charger, USB cable, electronic material, controls, etc.) are susceptible to electric shock by direct or indirect contact with electricity. Be cautious when handling the product and observe all safety procedures in this manual.

01. SAFETY INSTRUCTIONS

GENERAL WARNINGS

- This manual contains very important safety and usage information. Read all instructions carefully before beginning the installation/ usage procedures and keep this manual in a safe place that it can be consulted whenever necessary.
- This product is intended for use only as described in this manual. Any other enforcement or operation that is not mentioned is expressly prohibited, as it may damage the product and put people at risk causing serious injuries.
- This manual is intended firstly for specialized technicians, and does not invalidate the user's responsibility to read the "User Norms" section in order to ensure the correct functioning of the product.
- The installation and repair of this product may be done by qualified and specialized technicians, to assure every procedure are carried out in accordance with applicable rules and norms. Nonprofessional and inexperienced users are expressly prohibited of taking any action, unless explicitly requested by specialized technicians to do so.
- Installations must be frequently inspected for unbalance and the wear signals of the cables, springs, hinges, wheels, supports and other mechanical assembly parts.
- Do not use the product if it is necessary repair or adjustment is required.
- When performing maintenance, cleaning and replacement of parts, the product must be disconnected from power supply. Also including any operation that requires opening the product cover.
- The use, cleaning and maintenance of this product may be carried out by any persons aged eight years old and over and persons whose physical, sensorial or mental capacities are lower, or by persons without any knowledge of the product, provided that these are supervision and instructions given by persons with experienced in terms of usage of the product in a safe manner and who understands the risks and dangers involved.
- Children shouldn't play with the product or opening devices to avoid the motorized door or gate from being triggered involuntarily.
- If the power cable is damaged, it must be replaced by the manufacturer, after-sales service or similarly qualified personnel to avoid danger.
- The device must be disconnected from the electrical network when removing the battery.
- Ensure that blocking is avoided between the actuated part and its fixed parts due to the opening movement of the actuated part.

WARNINGS FOR TECHNICIANS

- Before beginning the installation procedures, make sure that you have all the devices and materials necessary to complete the installation of the product.
- You should note your Protection Index (IP) and operating temperature to ensure that is suitable for the installation site.
- Provide the manual of the product to the user and let them know how to handle it in an emergency.
- If the automatism is installed on a gate with a pedestrian door, a door locking mechanism must be installed while the gate is in motion.
- Do not install the product "upside down" or supported by elements do not support its weight. If necessary, add brackets at strategic points to ensure the safety of the automatism.
- Do not install the product in explosive site.
- Safety devices must protect the possible crushing, cutting, transport and danger areas of the motorized door or gate.
- Verify that the elements to be automated (gates, door, windows, blinds, etc.) are in perfect function, aligned and level. Also verify if the necessary mechanical stops are in the appropriate places.
- The control board must be installed on a safe place of any fluid (rain, moisture, etc.), dust and pests.
- You must route the various electrical cables through protective tubes, to protect them against mechanical exertions, essentially on

01. SAFETY INSTRUCTIONS

the power supply cable. Please note that all the cables must enter the control board from the bottom.
- If the automatism is to be installed at a height of more than 2,5m from the ground or other level of access, the minimum safety and health requirements for the use of work equipment workers at the work of Directive 2009/104/CE of European Parliament and of the Council of 16 September 2009.
- Attach the permanent label for the manual release as close as possible to the release mechanism.
- Disconnect means, such as a switch or circuit breaker on the electrical panel, must be provided on the product's fixed power supply leads in accordance with the installation rules.
- If the product to be installed requires power supply of 230Vac or 110Vac, ensure that connection is to an electrical panel with ground connection.
- The product is only powered by low voltage satefy with control board (only at 24V motors).
- Parts/products weighing more than 20 kg must be handled with special care due to the risk of injury. It is recommended to use suitable auxiliary systems for moving or lifting heavy objects.
- Pay special attention to the danger of falling objects or uncontrolled movement of doors/gates during the installation or operation of this product.

WARNINGS FOR USERS

- Keep this manual in a safe place to be consulted whenever necessary.
- If the product has contact with fluids without being prepared, it must immediately disconnect from the power supply to avoid short circuits, and consult a specialized technician.
- Ensure that technician has provided you the product manual and informed you how to handle the product in an emergency.
- If the system requires any repair or modification, unlock the automatism, turn off the power and do not use it until all safety conditions have been met.
- In the event of tripping of circuits breakers of fuse failure, locate the malfunction and solve it before resetting the circuit breaker or replacing the fuse. If the malfunction is not repairable by consult this manual, contact a technician.
- Keep the operation area of the motorized gate free while the gate in in motion, and do not create strength to the gate movement.
- Do not perform any operation on mechanical elements or hinges if the product is in motion.

RESPONSABILITY

- Supplier disclaims any liability if:
  - Product failure or deformation result from improper installation use or maintenance!
  - Safety norms are not followed in the installation, use and maintenance of the product.
  - Instructions in this manual are not followed.
  - Damaged is caused by unauthorized modifications
  - In these cases, the warranty is voided.

MOTORLINE ELECTROCELOS SA.
Travessa do Sobreiro, nº29
4755-474 Rio Côvo (Santa Eugénia)
Barcelos, Portugal

SYMBOLS LEGEND:

- Important safety notices

- Potentiometer information

- Useful information

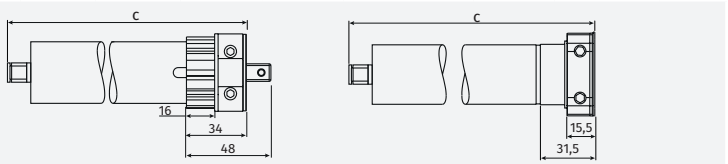
- Connectors information

- Programming information

- Buttons information

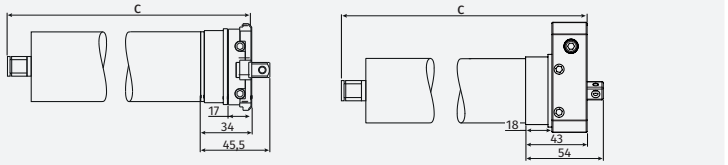
MOTORS MODELS AND REFERENCES

Ø 35mm



							W	C (mm)	
TUB10R	110/230Vac 50Hz	6 Nm	26 RPM	<43 dB	4 min.	-25°C to 55°C	126 W	555 mm	IP44
TUB20R	110/230Vac 50Hz	10 Nm	17 RPM	<43 dB	4 min.	-25°C to 55°C	126 W	545 mm	IP44
TUB20	110/230Vac 50Hz	10 Nm	17 RPM	<43 dB	4 min.	-25°C to 55°C	126 W	515 mm	IP44
TUB20EFRA	110/230Vac 50Hz	10 Nm	17 RPM	<43 dB	4 min.	-25°C to 55°C	126 W	611 mm	IP44

Ø 45mm

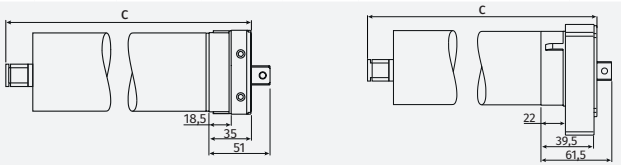


							W	C (mm)	
TUB25E	110/230Vac 50Hz	15 Nm	17 RPM	<43 dB	4 min.	-25°C to 55°C	143 W	463 mm	IP44
TUB25EFRA	110/230Vac 50Hz	15 Nm	17 RPM	<43 dB	4 min.	-25°C to 55°C	143 W	561 mm	IP44
TUB25 24V	24V	15 Nm	12 RPM	<43 dB	4 min.	-25°C to 55°C	60 W	540 mm	IP44
TUB25 CUT	110/230Vac 50Hz	15 Nm	17 RPM	<43 dB	4 min.	-25°C to 55°C	143 W	395 mm	IP44
TUB35E	110/230Vac 50Hz	20 Nm	17 RPM	<43 dB	4 min.	-25°C to 55°C	156 W	463 mm	IP44
TUB35EFRA	110/230Vac 50Hz	20 Nm	17 RPM	<43 dB	4 min.	-25°C to 55°C	156 W	561 mm	IP44
TUB50E	110/230Vac 50Hz	30 Nm	15 RPM	<43dB	4 min.	-25°C to 55°C	204 W	483 mm	IP44
TUB50EFRA	110/230Vac 50Hz	30 Nm	15 RPM	<43 dB	4 min.	-25°C to 55°C	204 W	592 mm	IP44
TUB50MT	110/230Vac 50Hz	30 Nm	15 RPM	<43 dB	4 min.	-25°C to 55°C	204 W	620 mm	IP44
TUB70E	110/230Vac 50Hz	40 Nm	12 RPM	<43 dB	4 min.	-25°C to 55°C	210 W	511 mm	IP44
TUB70EFRA	110/230Vac 50Hz	40 Nm	12 RPM	<43 dB	4 min.	-25°C to 55°C	227 W	631 mm	IP44
TUB70MT75	110/230Vac 50Hz	40 Nm	12 RPM	<43 dB	4 min.	-25°C to 55°C	210 W	590 mm	IP44
TUB90E	110/230Vac 50Hz	50 Nm	12 RPM	<43 dB	4 min.	-25°C to 55°C	232 W	511 mm	IP44
TUB90EFRA	110/230Vac 50Hz	50 Nm	12 RPM	<43 dB	4 min.	-25°C to 55°C	232 W	631 mm	IP44
TUB90M8MT	110/230Vac 50Hz	50 Nm	12 RPM	<43 dB	8 min.	-25°C to 55°C	227 W	590 mm	IP44

02. THE AUTOMATISM

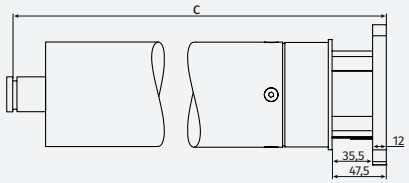
MOTORS MODELS AND REFERENCES

Ø 59mm



							W	C (mm)	
TUB140	110/230Vac 50Hz	80 Nm	12 RPM	<50 dB	4 min.	-25°C to 55°C	350 W	607 mm	IP44
TUB140MT	110/230Vac 50Hz	80 Nm	12 RPM	<50 dB	4 min.	-25°C to 55°C	350 W	604 mm	IP44
TUB180	110/230Vac 50Hz	120 Nm	9 RPM	<50 dB	4 min.	-25°C to 55°C	360 W	607 mm	IP44
TUB180MT	110/230Vac 50Hz	120 Nm	9 RPM	<50 dB	4 min.	-25°C to 55°C	360 W	688 mm	IP44
TUB200R2	110/230Vac 50Hz	140 Nm	2 RPM	<50 dB	4 min.	-25°C to 55°C	350 W	607 mm	IP44

Ø 92mm



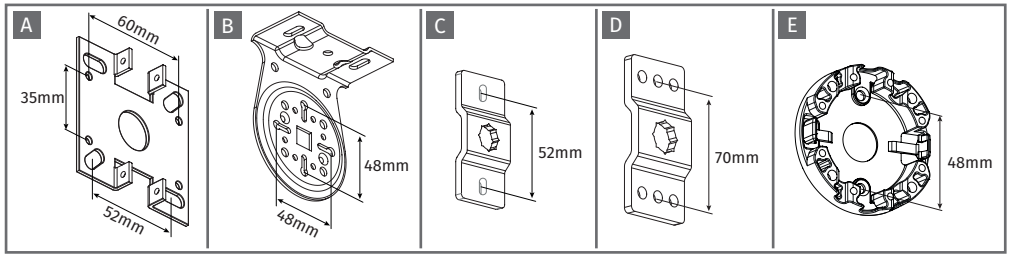
							W	C (mm)	
TUB300	110/230Vac 50Hz	180 Nm	12 RPM	<65 dB	4 min.	-25°C to 55°C	570 W	635 mm	IP44
TUB600	110/230Vac 50Hz	300 Nm	6 RPM	<65 dB	4 min.	-25°C to 55°C	580 W	663 mm	IP44

Standard Model- Motor with mechanical limit switch, without crank handle and without control board.
FRA Model- Motor with built-in control board.
MT Model- Motor with crank handle for manually opening/closing.
FRA MT Model- Motor with crank handle and built-in control board.
CUT Model- Reduced length motor (external capacitor).

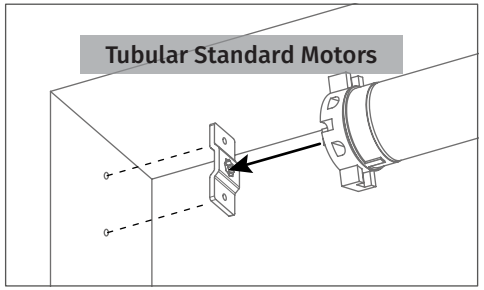
⚠ All our motors use mechanical limit switches.

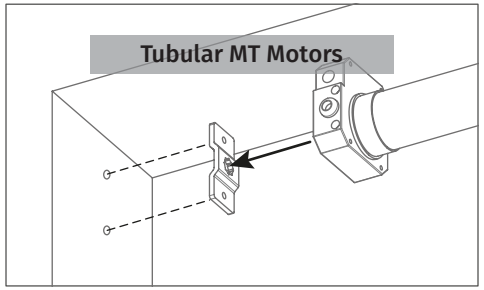
03. INSTALLATION

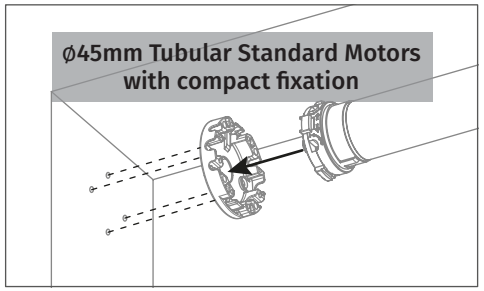
PLACING THE MOTOR ON THE WALL

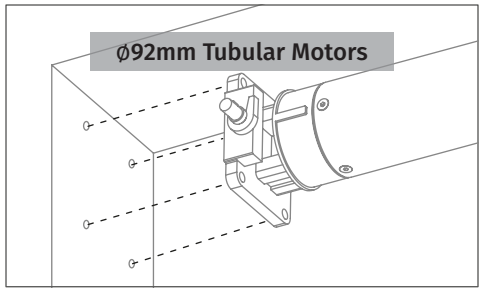


A • Plate for fixing all the TUB20 e TUB20E FRA motors.
B • Plate for fixing Ø45mm compact motors.
C • Plate for fixing ø35mm and ø45mm, Standard and MT (crank handle) motors.
D • Plate for fixing ø59mm Standard motors.
E • Plate for fixing the motors with a ø45mm compact fixation.









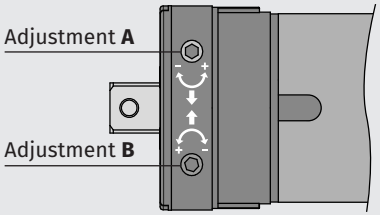
01 • Place the fixing accessory on the wall and mark the holes to fix it.
02 • Drill the holes and apply fixing dowels suitable for the screws to be used.
03 • Secure the accessory on the wall. For Ø92mm TUB, fix the motor directly because it doesn't need accessory.
04 • Apply the motor on the accessory. When using C or D accessories, use a pin to hold it.

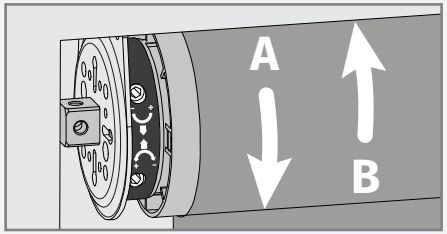
03. INSTALLATION

LIMIT SWITCHES

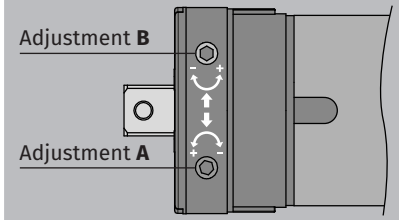
Before you start to tune the limit switches, confirm the orientation of your motor tuning arrows. This may have one or two possible orientations on the same motor: arrows going in or out. In any position, the adjustment A rotates the tube from the top to the bottom and the adjustment B rotates from the upwards. Any of the adjustments could be opening or closing depending on the winding of the canvas (indoor or outdoor winding).

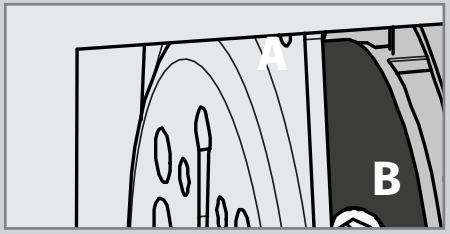
POSITION 1 **ARROWS INWARDS**





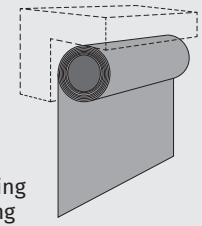
POSITION 2 **ARROWS OUTWARDS**



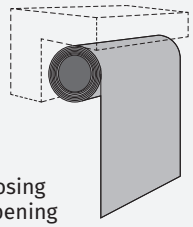


• WINDING

The canvas can wrap through the interior or the exterior side.
The direction will determine whether opening / closing is tuned in A or B.



Interior:
Adjustment A - Opening
Adjustment B - Closing

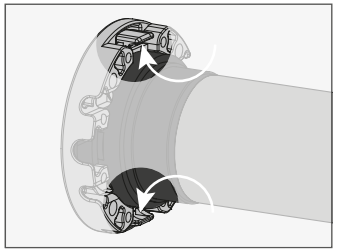


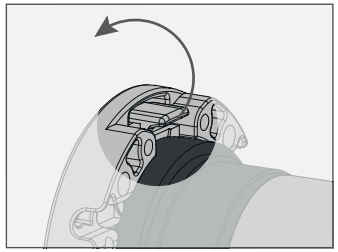
Exterior:
Adjustment A - Closing
Adjustment B - Opening

ATTENTION: All information given on this page is compatible with motors fitted with the head on the left side. If you want to install on the right side, turn the information.

04. ADDITIONAL INFORMATION

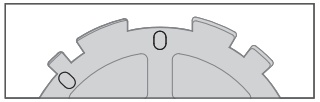
DISASSEMBLING COMPACT ACCESSORY



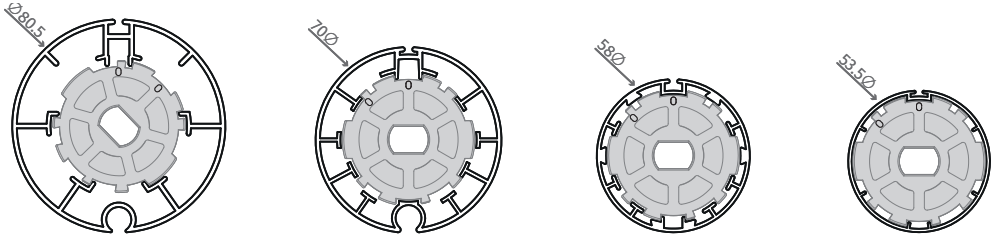


Disassemble the motor from the compact mounting accessory. Just open the tabs as shown in the figure in order to release the motor.

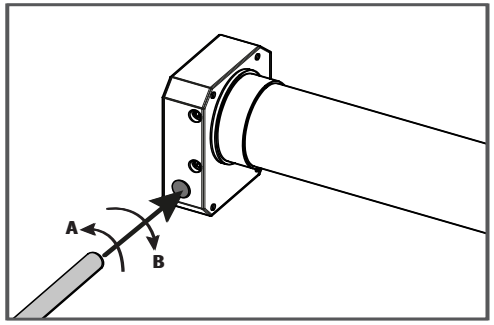
INSTALLATION WITH ACCESSORY



Note: Both on the front and in the back adapter, there are two marks to guide the assembly in each tube, in accordance with the following schemes.

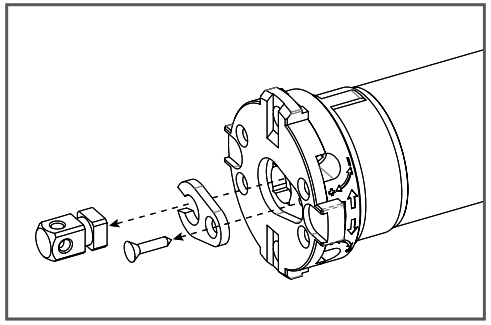


USE OF THE CRANK HANDLE



A - Rotate the crank handle in the direction A to close.
B - Rotate the crank handle in the direction B to open.

REMOVE SUPPORT SQUARE SHAFT



Loosen the screw to remove the support square shaft.

05. TUB FRA - PROGRAMMING

TECHNICAL SPECIFICATIONS

• **Frequency Transmission**	433,92 Mhz
• **Nº of Channels**	120
• **Code Type**	Rolling Code

⚠

The control board MC4SP has capacity for 120 different remote controls. Once out of memory, 4 beeps will signal that the memory is full. Start each the following settings with the control board disconnected from the power supply.

REMOTE CONTROLS

To know where is the location of the buttons **OPEN**, **STOP** and **CLOSE** on the several remote controls, check the following schemes:

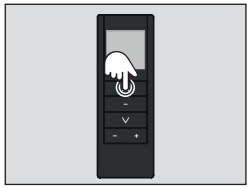
FALK	MX95/96/97/98
1 OPEN **2** STOP **3** CLOSE **4** ND	**1** OPEN **2** STOP **3** CLOSE

05. TUB FRA - PROGRAMMING

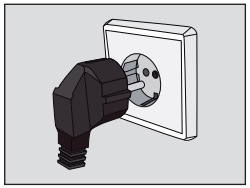
PROGRAMMING

WARNING: Always start any programming with control board disconnected from the power supply!

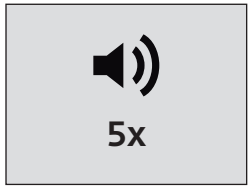
Programming new remote control:



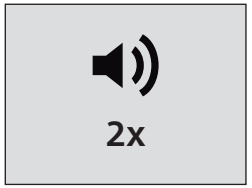
01 • Continuously press the **OPEN** remote control button to be programmed.



02 • Connect the control board to a 110/230V power supply.



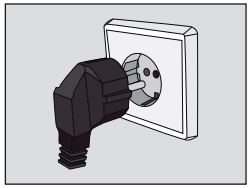
03 • Keep the **OPEN button** pressed for 10 seconds, during which the control board emits slow 5 beeps.



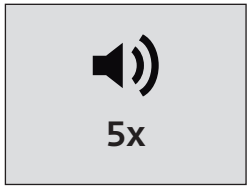
04 • After 10 sec, the control board emits 2 quick beeps confirming the programming success.

Change motor's direction:

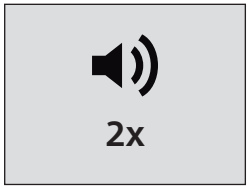
01 • Continuously press the **CLOSE** remote control button to be programmed.



02 • Connect the control board to a 110/230V power supply.

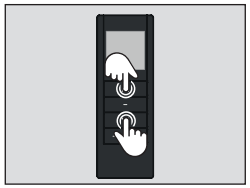


03 • Keep the **CLOSE button** pressed for 10 seconds, during which the control board emits slow 5 beeps.

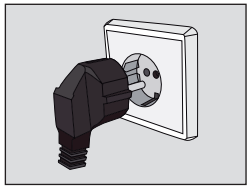


04 • After 10 sec, the control board emits 2 quick beeps confirming the programming success.

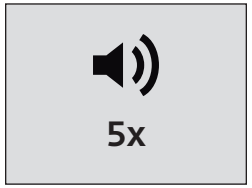
Erase the remote controls from the control board's memory:



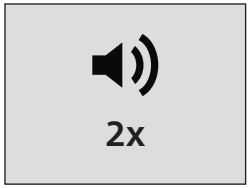
01 • Continuously press the **OPEN** and **CLOSE** remote control button to be programmed.



02 • Connect the control board to a 110/230V power supply.



03 • Keep the **OPEN** and **CLOSE** button pressed for 10 seconds, during which the control board emits slow 5 beeps.



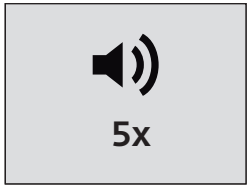
04 • After 10 sec, the control board emits 2 quick beeps confirming the programming success.

05. TUB FRA - PROGRAMMING

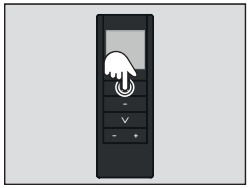
PROGRAMMING

Program a new remote control through another already programmed:

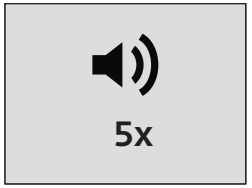
01 • Press and hold the **OPEN** button of an already programmed remote control for 15 seconds.



02 • After 15 seconds, the control board emits 5 quick beeps. Release the button of the remote control already programmed (if you continue to press the button, the control board will signal with long and fast beeps).



03 • Press and hold the **OPEN** button of the remote control you want to program.



04 • Keep the **OPEN** button pressed for 10 seconds, during which the control board emits 5 slow beeps.

05 • After 10 seconds, the control board emits 3 quick beeps confirming the success of the programming. Release the remote control button to finish programming the 3 buttons.