EN

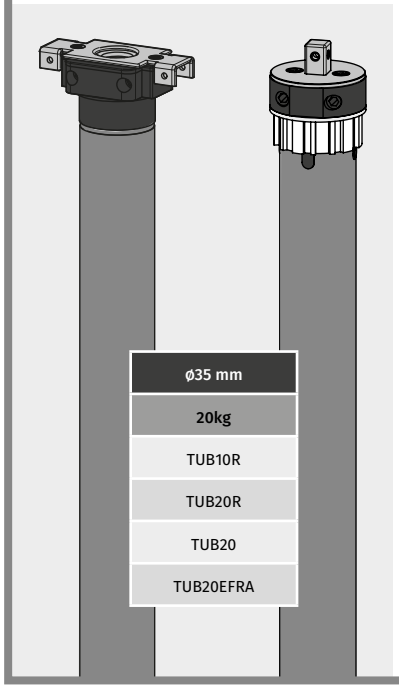
TUB

USER/INSTALLER MANUAL

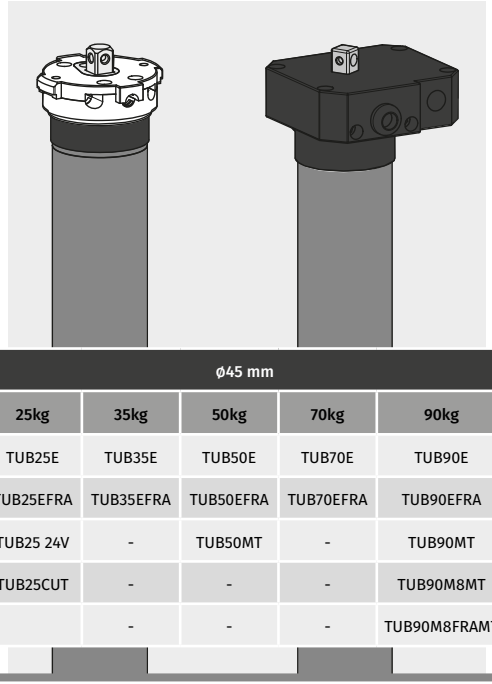
Motorline® PROFESSIONAL

PORTUGAL

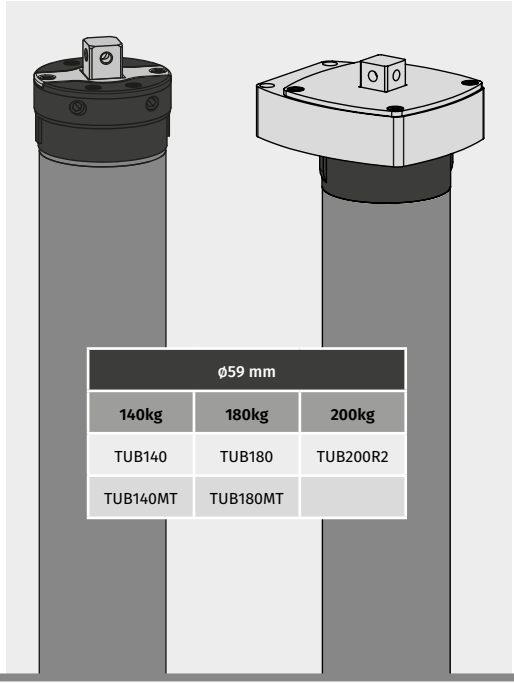
v6.0
REV. 09/2017



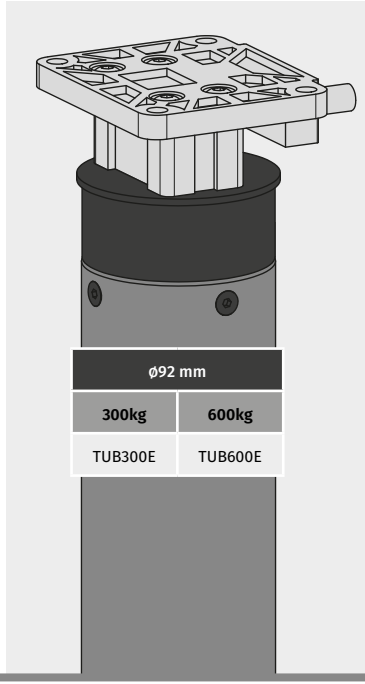
ø35 mm
20kg
TUB10R
TUB20R
TUB20
TUB20EFRA



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



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



ø92 mm	
300kg	600kg
TUB300E	TUB600E

00. CONTENT

INDEX

01. SAFETY INSTRUCTIONS

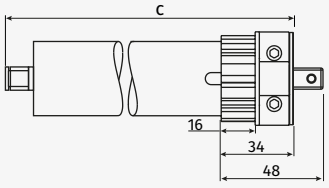
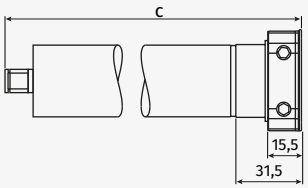
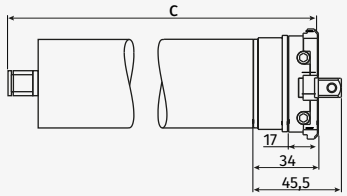
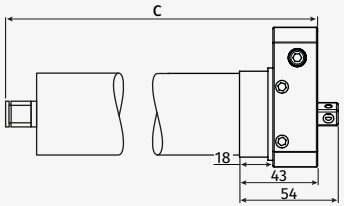
STANDARDS TO FOLLOW

ATTENTION:

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.
 	(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 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.

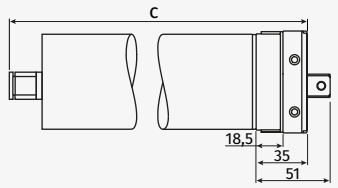
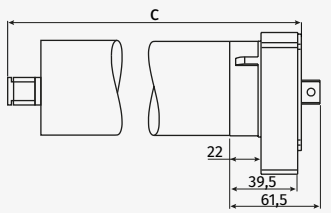
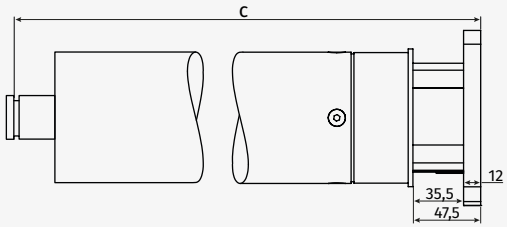
- It is important for your safety that these instructions are followed.
- Keep these instructions in a safe place for future reference.
- The **ELECTROCELOS S.A.** is not responsible for the improper use of the product, or other use than that for which it was designed.
- The **ELECTROCELOS S.A.** is not responsible if safety standards were not taken into account when installing the equipment, or for any deformation that may occur.
- The **ELECTROCELOS S.A.** is not responsible for insecurity and malfunction of the product when used with components that were not sold by the them.
- This product was designed and manufactured strictly for the use indicated in this manual.
- This control board is not appropriate for inflammable or explosive environments.
- Any other use not expressly indicated may damage the product and/or can cause physical and property damages, and will void the warranty.
- Do not make any changes to the automation components and/or their accessories.
- Control board for indoor use with 230V connection.
- Keep remote controls away from children, to prevent the automated system from being activated involuntarily.
- The customer shall not, under any circumstances, attempt to repair or tune the automatism. Must call qualified technician only.
- The installer must have certified professional knowledge at the level of mechanical assemblies in doors and gates and control board programmation. He should also be able to perform electrical connections in compliance with all applicable regulations.
- The installer should inform the customer how to handle the product in an emergency and provide him the manual.

MOTORS MODELS AND REFERENCES

						W	C (mm)
Ø 35mm							
TUB10R	230Vac 50Hz	6 Nm	26 RPM	<43 dB	4 min.	126 W	555 mm
TUB20R	230Vac 50Hz	10 Nm	17 RPM	<43 dB	4 min.	126 W	545 mm
TUB20	230Vac 50Hz	10 Nm	17 RPM	<43 dB	4 min.	126 W	515 mm
TUB20EFRA	230Vac 50Hz	10 Nm	17 RPM	<43 dB	4 min.	126 W	611 mm
Ø 45mm							
TUB25E	230Vac 50Hz	15 Nm	17 RPM	<43 dB	4 min.	143 W	463 mm
TUB25EFRA	230Vac 50Hz	15 Nm	17 RPM	<43 dB	4 min.	143 W	561 mm
TUB25 24V	24V	15 Nm	12 RPM	<43 dB	4 min.	60 W	540 mm
TUB25 CUT	230Vac 50Hz	15 Nm	17 RPM	<43 dB	4 min.	143 W	395 mm
TUB35E	230Vac 50Hz	20 Nm	17 RPM	<43 dB	4 min.	156 W	463 mm
TUB35EFRA	230Vac 50Hz	20 Nm	17 RPM	<43 dB	4 min.	156 W	561 mm
TUB50E	230Vac 50Hz	30 Nm	15 RPM	<43dB	4 min.	204 W	483 mm
TUB50EFRA	230Vac 50Hz	30 Nm	15 RPM	<43 dB	4 min.	204 W	592 mm
TUB50MT	230Vac 50Hz	30 Nm	15 RPM	<43 dB	4 min.	204 W	620 mm
TUB70E	230Vac 50Hz	40 Nm	12 RPM	<43 dB	4 min.	210 W	511 mm
TUB70EFRA	230Vac 50Hz	40 Nm	12 RPM	<43 dB	4 min.	227 W	631 mm
TUB90E	230Vac 50Hz	50 Nm	12 RPM	<43 dB	4 min.	232 W	511 mm
TUB90EFRA	230Vac 50Hz	50 Nm	12 RPM	<43 dB	4 min.	232 W	631 mm
TUB90M8MT	230Vac 50Hz	50 Nm	12 RPM	<43 dB	8 min.	227 W	590 mm

02. THE AUTOMATISM

MOTORS MODELS AND REFERENCES

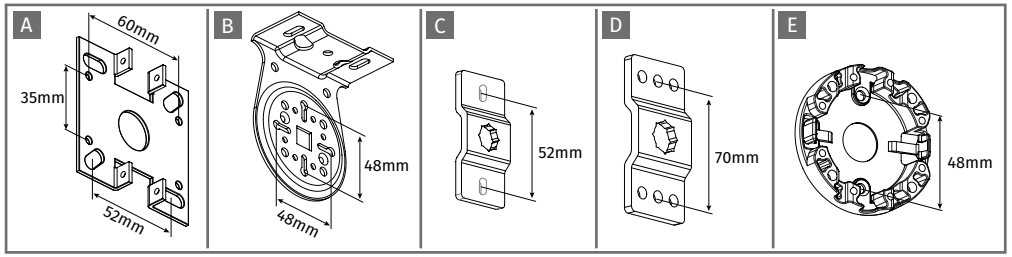
						W	C (mm)
Ø 59mm							
TUB140	230Vac 50Hz	80 Nm	12 RPM	<50 dB	4 min.	350 W	607 mm
TUB140MT	230Vac 50Hz	80 Nm	12 RPM	<50 dB	4 min.	350 W	604 mm
TUB180	230Vac 50Hz	120 Nm	9 RPM	<50 dB	4 min.	360 W	607 mm
TUB180MT	230Vac 50Hz	120 Nm	9 RPM	<50 dB	4 min.	360 W	688 mm
TUB200R2	230Vac 50Hz	140 Nm	2 RPM	<50 dB	4 min.	350 W	607 mm
Ø 92mm							
TUB300	230Vac 50Hz	180 Nm	12 RPM	<65 dB	4 min.	570 W	635 mm
TUB600	230Vac 50Hz	300 Nm	6 RPM	<65 dB	4 min.	580 W	663 mm

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

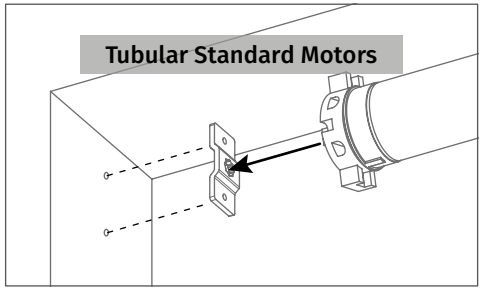
⚠ All our motors use mechanical limit switches.

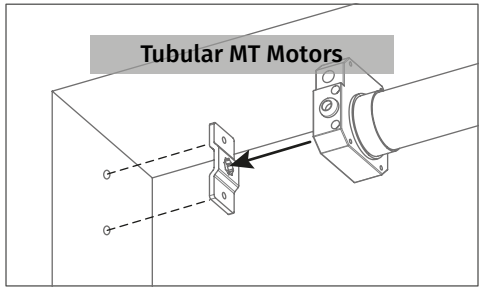
03. INSTALLATION

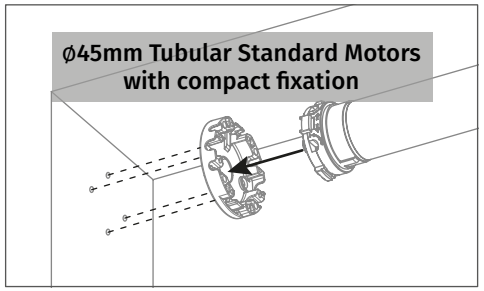
PLACING THE MOTOR ON THE WALL

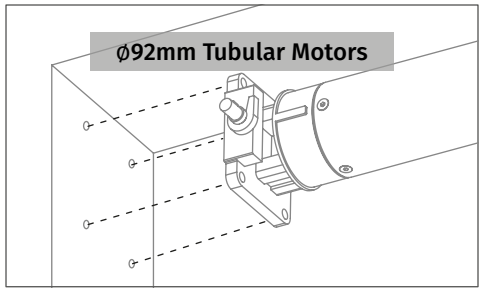


A • Plate for fixing all the TUB20 e TUB20E FRA motors.
B • Plate for fixing Ø45mm compact motors.
C • Plate for fixing ø35mm and ø45mm, Standard and MT (handle) motors.
D • Plate for fixing ø59mm Standard motors.
E • Plate for fixing the motors with a ø45mm compact fixation.









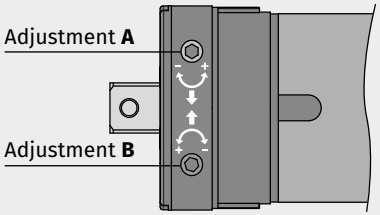
01 • Place the fixing accessory on the wall and mark the holes to fix it.
02 • Drill the holes and apply adapter sleeves for the screws to be used.
03 • Secure the accessory on the wall. For Ø92mm TUB, fix the motor directly because it doesn't need accessory.
04 • Apply the motor on the accessory. When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

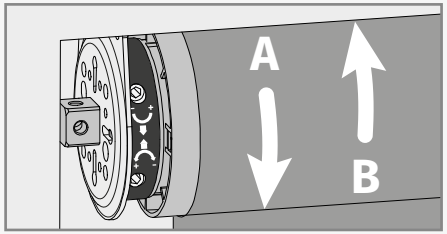
03. INSTALLATION

LIMIT SWITCHES

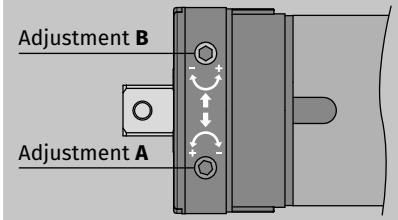
Before you start to tune the limit switches, confirm the orientation of your engine tuning arrows. This may have one or two possible orientations on the same motor: arrows going in or out. In any position, the adjustment A rotates the tube from the top to the bottom and the adjustment B rotates from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

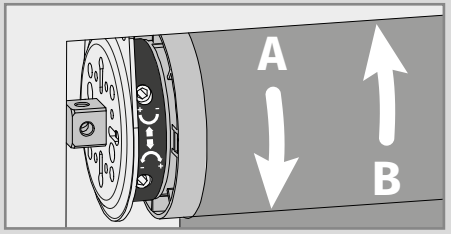
POSITION 1 **ARROWS INWARDS**





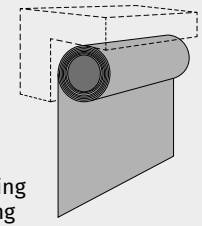
POSITION 2 **ARROWS OUTWARDS**



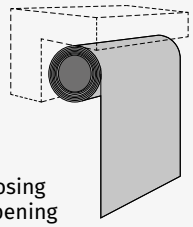


• WINDING

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

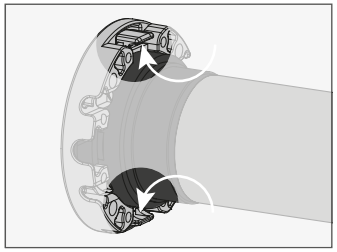


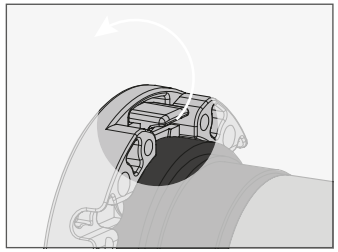
Exterior:
Adjustment A - Closing
Adjustment B - Opening

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

04. ADDITIONAL INFORMATION

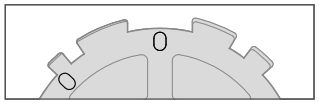
DISMANTLING COMPACT ACCESSORY



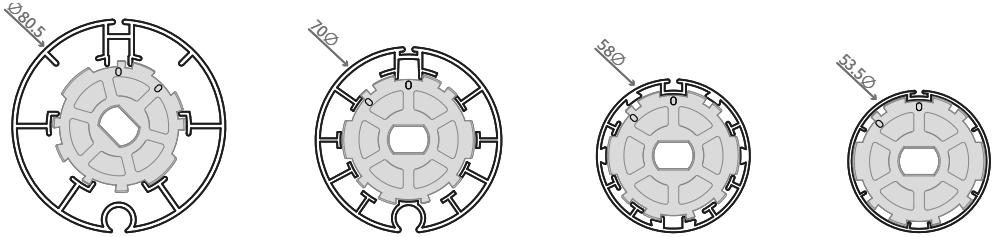


Disassemble the motor from the compact mounting accessory. Just open the tabs as shown in the figure in order to release the motor.

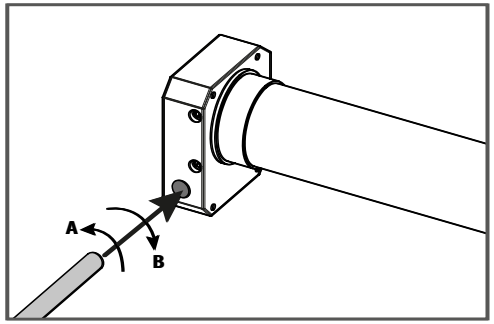
INSTALLATION WITH ACCESSORY



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.

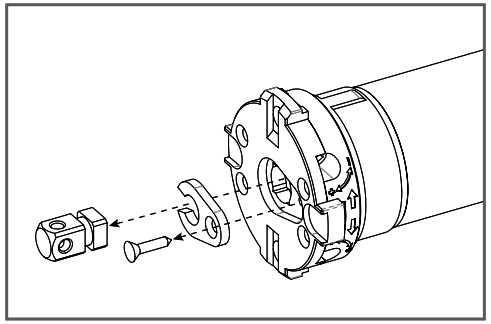


CRANK USAGE



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

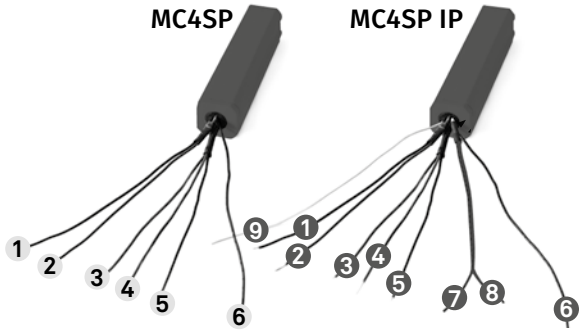
REMOVE SUPPORT SQUARE SHAFT



Loosen the screw to remove the support square shaft.

05. CONTROL BOARD

CONETORS DESCRIPTION



A	CN1: CENTRAL'S POWER SUPPLY CONNECTORS	C	
1	Blue - Line Input AC230V (neutral)	6	Antenna
2	Black - Line Input AC230V (phase)		

B	CN2: MOTOR'S CONNECTIONS	D	SWITCH
3	Black - Motor's Output AC230V (UP)	7	Wire for switch - UP
4	Blue - Motor's Output AC230V (COMUM)	8	Wire for switch - DOWN
5	Brown - Motor's Output AC230V (DOWN)	9	White - Common

TECHNICAL SPECIFICATIONS

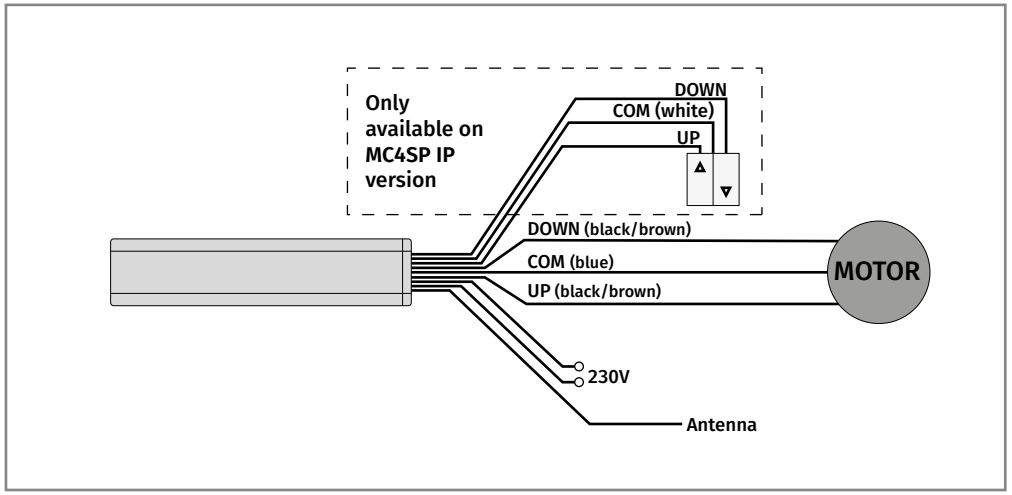
· **Power Supply**	230Vac | 50-60Hz
· **Motor's Output**	230Vac 750W máx.
· **Operating Temperature**	-10°C a +65°C
· **Frequency Transmission**	433,92 Mhz
· **Nº of Channels**	6
· **Code Type**	Rolling Code
· **Protection Level**	IP44
· **Dimensions**	119X28X26mm

⚠

The control board MC4SP has capacity for 15 different controllers. Once out of memory, 4 beeps will signal that the memory is full. Start each the following settings with the central disconnected from the mains.

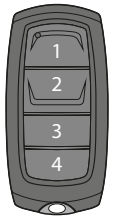
05. CONTROL BOARD

CONNECTION DIAGRAM



RADIO-COMMANDS

To know where is the location of the keys **OPEN**, **STOP** and **CLOSE** on the several radio-commands, check the following schemes:

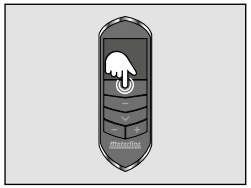
FALK	MX4SP	MXS4SP	MX5SP	MX95/96/97/98
				
1 OPEN **2** STOP **3** CLOSE **4** ND	**1** OPEN **2** STOP **3** CLOSE **4** ND	**1** OPEN **2** ND **3** STOP **4** CLOSE	**1** ND **2** OPEN **3** STOP **4** CLOSE	**1** OPEN **2** STOP **3** CLOSE

05. CONTROL BOARD

PROGRAMMING

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

Programming new transmitter:



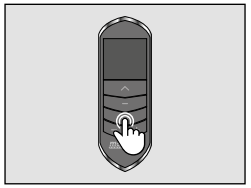
01 • Continuously press the **OPEN** key transmitter to be programmed.

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

03 • Keep the **OPEN** key 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:



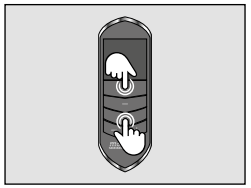
01 • Continuously press the **CLOSE** key transmitter to be programmed.

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

03 • Keep the **CLOSE** key 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 controllers from the control board's memory:



01 • Continuously press the **OPEN** and **CLOSE** key transmitter to be programmed.

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

03 • Keep the **OPEN** and **CLOSE** key 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.