

TRIPOD TURNSTILES

FA00151-EN



INSTALLATION MANUAL

STILE ONE

EN English



CAUTION!
important personal safety instructions:
READ CAREFULLY!



FOREWORD

• THIS PRODUCT SHOULD ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS EXPLICITLY DESIGNED. ANY OTHER USE IS CONSIDERED DANGEROUS. CAME S.p.A. IS NOT LIABLE FOR DAMAGE CAUSED BY IMPROPER, INCORRECT OR UNREASONABLE USE. • THE SAFETY OF THE PRODUCT, AND THEREFORE ITS PROPER INSTALLATION, DEPENDS ON TOTAL COMPLIANCE WITH THE TECHNICAL SPECIFICATIONS AND INSTALLATION PROCEDURES, AS WELL AS WITH RULES REGARDING SAFETY AND USE, EXPRESSLY MENTIONED IN THE TECHNICAL DOCUMENTATION FOR THE PRODUCTS THEMSELVES. • KEEP THESE WARNINGS TOGETHER WITH THE INSTALLATION AND OPERATION MANUALS FOR THE OPERATOR SYSTEM COMPONENTS.

BEFORE INSTALLING

*(PRELIMINARY CHECK: IN CASE OF A NEGATIVE OUTCOME,
DO NOT PROCEED UNTIL YOU HAVE COMPLIED
WITH THE SAFETY REQUIREMENTS)*

• INSTALLATION AND TESTING MUST ONLY BE PERFORMED BY QUALIFIED PERSONNEL • CABLE ROUTING, INSTALLATION, CONNECTION AND TESTING MUST BE CARRIED OUT TO THE HIGHEST STANDARDS OF WORKMANSHIP AND IN ACCORDANCE WITH APPLICABLE STANDARDS AND LAWS • BEFORE STARTING ANY OPERATION, YOU MUST READ ALL THE INSTRUCTIONS; INCORRECT INSTALLATION MAY BE DANGEROUS AND INJURE AND DAMAGE PEOPLE AND THINGS • CHECK THAT THE OPERATOR IS IN GOOD MECHANICAL CONDITION, THAT IT IS BALANCED AND ALIGNED, AND THAT IT OPENS AND CLOSES CORRECTLY. IF NEEDED, ALSO INSTALL SUITABLE GUARDS OR USE APPROPRIATE ADDITIONAL SAFETY SENSORS • ENSURE THAT OPENING THE TURNSTILE DOES NOT CREATE A DANGEROUS SITUATION • DO NOT MOUNT THE OPERATOR UPSIDE DOWN OR ONTO ANY ELEMENTS THAT MAY FOLD UNDER ITS WEIGHT. IF NEEDED, ADD SUITABLE REINFORCEMENTS AT THE POINTS WHERE IT IS SECURED • DO NOT INSTALL ON GROUND THAT IS NOT LEVEL • CHECK THAT ANY LAWN WATERING DEVICES WILL NOT WET THE OPERATOR FROM THE BOTTOM UP.

INSTALLATION

• CAREFULLY SECTION OFF THE ENTIRE SITE TO PREVENT UNAUTHORISED ACCESS, ESPECIALLY BY MINORS AND CHILDREN • BE CAREFUL WHEN HANDLING OPERATORS THAT WEIGH MORE THAN 25 KG. IN SUCH CASES, USE PROPER WEIGHT HANDLING SAFETY EQUIPMENT • CE SAFETY DEVICES MUST BE INSTALLED IN COMPLIANCE WITH APPLICABLE LEGISLATION AND ACCORDING TO THE HIGHEST STANDARDS OF WORKMANSHIP, BEARING IN MIND THE ENVIRONMENT, THE TYPE OF SERVICE REQUIRED AND THE OPERATING FORCES APPLIED TO THE MOVING TURNSTILES. POINTS WHERE THERE IS A RISK OF CRUSHING, SHEARING OR DRAGGING MUST BE PROTECTED • END USERS MUST BE INFORMED OF ANY RESIDUAL RISKS BY MEANS OF SPECIAL PICTOGRAMS AS ENVISAGED BY LEGISLATION • ALL OPENING COMMANDS (BUTTONS, KEY SELECTORS, MAGNETIC READERS ETC.) MUST BE INSTALLED AT LEAST 1.85 M FROM THE PERIMETER OF THE AREA OF TURNSTILE MOVEMENT, OR WHERE THEY CANNOT BE REACHED FROM OUTSIDE THROUGH THE TURNSTILE. IN ADDITION, THE DIRECT COMMANDS (BUTTON, TOUCH ETC.) MUST BE INSTALLED AT A MINIMUM HEIGHT OF 1.5 M AND MUST NOT BE ACCESSIBLE TO THE PUBLIC • THE TURNSTILE MUST CLEARLY SHOW THE IDENTIFICATION DATA • BEFORE CONNECTING THE TURNSTILE TO THE POWER SUPPLY, MAKE SURE THAT THE IDENTIFICATION DATA MATCHES THE MAINS DATA • THE TURNSTILE MUST BE CONNECTED TO AN EFFECTIVE EARTHING SYSTEM COMPLIANT WITH APPLICABLE STANDARDS • THE MANUFACTURER IS NOT LIABLE FOR THE USE OF NON-ORIGINAL PRODUCTS; THIS VOIDS THE WARRANTY • BEFORE DELIVERY TO THE USER, CHECK THAT THE SYSTEM COMPLIES WITH THE EN12453 AND EN12445 STANDARDS, ENSURING THAT THE OPERATOR HAS BEEN ADEQUATELY ADJUSTED AND THAT THE SAFETY AND PROTECTION DEVICES ARE WORKING CORRECTLY • AFFIX WARNING SYMBOLS CLEARLY WHERE NECESSARY IN A CLEARLY VISIBLE POSITION.

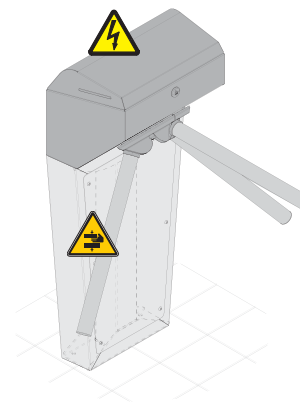
**SPECIAL INSTRUCTIONS AND
ADVICE FOR USERS**

• KEEP THE TURNSTILE'S AREA OF OPERATION CLEAN AND CLEAR OF ANY OBSTACLES. CHECK THAT THE PHOTOCELLS' AREA OF OPERATION IS FREE FROM OBSTACLES • CHILDREN MUST BE SUPERVISED TO MAKE SURE THEY DO NOT PLAY WITH THE OPERATOR AND THE FIXED CONTROL DEVICES OR STAND IN THE TURNSTILE'S AREA OF OPERATION. KEEP THE REMOTE CONTROL DEVICES (TRANSMITTERS) OR ANY OTHER CONTROL DEVICE OUT OF REACH OF CHILDREN, TO PREVENT THE OPERATOR BEING ACTIVATED INVOLUNTARILY. • THE OPERATOR CAN BE USED BY CHILDREN AGED OVER 8 AND BY PERSONS WITH REDUCED PHYSICAL, SENSORIAL OR MENTAL ABILITIES, OR BY PERSONS WITH NO EXPERIENCE OR WITHOUT THE AWARENESS NEEDED, AS LONG AS THEY ARE SUPERVISED BY OR HAVE RECEIVED INSTRUCTIONS REGARDING SAFE USE OF THE OPERATOR AND UNDERSTAND THE RELATED DANGERS. CLEANING AND MAINTENANCE MEANT TO BE PERFORMED BY THE USER MUST NOT BE PERFORMED BY

UNSUPERVISED CHILDREN. • CHECK THE SYSTEM FREQUENTLY TO SEE WHETHER ANY ANOMALIES OR SIGNS OF WEAR AND TEAR APPEAR ON THE MOVING PARTS, ON THE OPERATOR COMPONENTS, ON THE SECURING POINTS AND DEVICES, ON THE CABLES OR ON ANY ACCESSIBLE CONNECTIONS. KEEP ANY JOINTS LUBRICATED AND CLEAN, AND DO THE SAME WHERE FRICTION MAY OCCUR • PERFORM FUNCTIONAL TESTS ON PHOTOCELLS EVERY SIX MONTHS. ENSURE THAT THE GLASS ON THE PHOTOCELLS IS KEPT CLEAN (USE A CLOTH SLIGHTLY MOISTENED WITH WATER; DO NOT USE SOLVENTS OR ANY OTHER CHEMICALS AS THESE COULD DAMAGE THE DEVICES) • IF THE SYSTEM REQUIRES REPAIRS OR MODIFICATIONS, DISCONNECT THE POWER TO THE OPERATOR AND DO NOT USE IT UNTIL SAFETY CONDITIONS HAVE BEEN RESTORED • CUT OFF THE ELECTRICAL POWER SUPPLY FOR MANUAL OPENING. READ THE INSTRUCTIONS • IF THE POWER CABLE IS DAMAGED, IT MUST BE REPLACED BY THE MANUFACTURER OR THE TECHNICAL ASSISTANCE SERVICE OR BY A PERSON WITH A SIMILAR QUALIFICATION SO AS TO PREVENT ANY RISKS • IT IS STRICTLY FORBIDDEN FOR USERS TO PERFORM OPERATIONS THEY ARE NOT EXPLICITLY REQUIRED AND ASKED TO DO. FOR REPAIRS, ADJUSTMENTS AND EXTRAORDINARY MAINTENANCE, CONTACT THE SPECIALIST TECHNICAL SERVICE CENTRE • ON THE PERIODIC MAINTENANCE LOG, NOTE DOWN THE CHECKS YOU HAVE DONE.

**FURTHER SPECIAL INSTRUCTIONS
AND ADVICE FOR ALL**

• AVOID WORKING NEAR THE TURNSTILES OR MOVING MECHANICAL PARTS • STAY CLEAR OF THE TURNSTILE'S AREA OF OPERATION WHEN IN MOTION • DO NOT RESIST THE DIRECTION OF MOVEMENT OF THE OPERATOR; THIS MAY PRESENT A SAFETY HAZARD • AT ALL TIMES BE EXTREMELY CAREFUL ABOUT DANGEROUS POINTS THAT MUST BE INDICATED BY PROPER PICTOGRAMS AND/OR BLACK AND YELLOW STRIPES • WHEN USING A SELECTOR OR COMMAND IN 'HOLD-TO-RUN' MODE, KEEP CHECKING THAT THERE ARE NO PEOPLE IN THE AREA OF OPERATION OF THE MOVING PARTS. DO THIS UNTIL YOU RELEASE THE COMMAND • THE TURNSTILE MAY MOVE AT ANY TIME WITHOUT WARNING • ALWAYS CUT THE POWER WHEN CLEANING OR PERFORMING MAINTENANCE.






DANGER OF HAND CRUSHING



DANGER - LIVE PARTS

KEY

-  This symbol indicates parts to read carefully.
 -  This symbol indicates parts about safety.
 -  This symbol tells you what to say to end users.
- Measurements, unless otherwise indicated, are in millimetres.

DESCRIPTION

Two-way motorised turnstile, made from grey painted textured steel complete with control board. In the event of a blackout, the tripod is free to move in both directions. Arms made from AISI 304 steel with gloss finish.

Programming and control fully managed from access control system remotely via CRP.

The motorised turnstile is two-way and selective, allowing only one person at a time to pass through in the chosen direction. After receiving a command, the tripod turns slightly to encourage the person to pass through; as soon as it detects a push from a user, it completes the rotation and then repositions itself waiting for a new command. It is also possible to select free rotation and blocked mode.

Break-in system: any attempt to force the turnstile is detected by the encoder and sets off the buzzer.

Arm drop system: in emergency situations, in the event of a power cut, the horizontal arm moves down, freeing the passage.

The range includes:

001PSMM01 - Standard suspended tripod turnstile

001PSMM02 - Suspended tripod turnstile with arm drop

Optional accessories:

001PSMMA-A - Indicator LED bars

001PSMMA-B - Wall fixing bracket

001PSMMA-C - Boxed single-leg

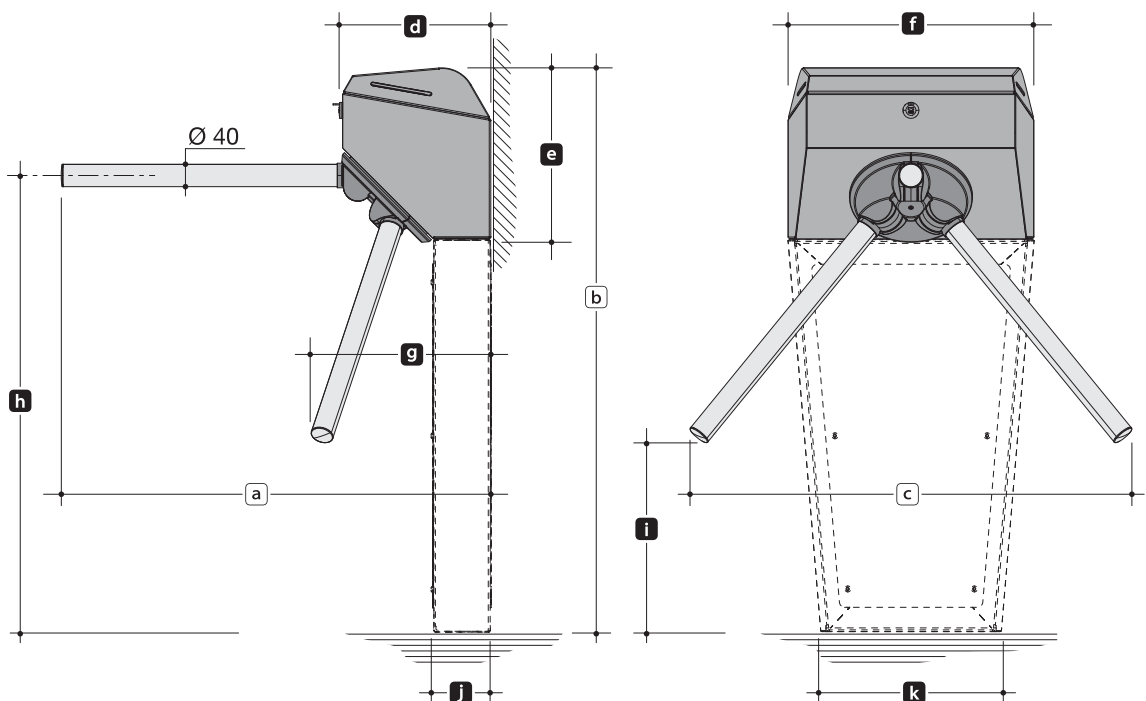
001PSMMA-D - Tubular single-leg

Intended use

Used for access selection and authorisation in areas with high transit intensity such as tradefair grounds, stadiums, sports centres, parking facilities, shopping centres, undergrounds, public offices.

Dimensions

- a** = 770
- b** = 998
- c** = 792
- d** = 265
- e** = 307
- f** = 440
- g** = 322
- h** = 805
- i** = 326
- j** = 100
- k** = 320



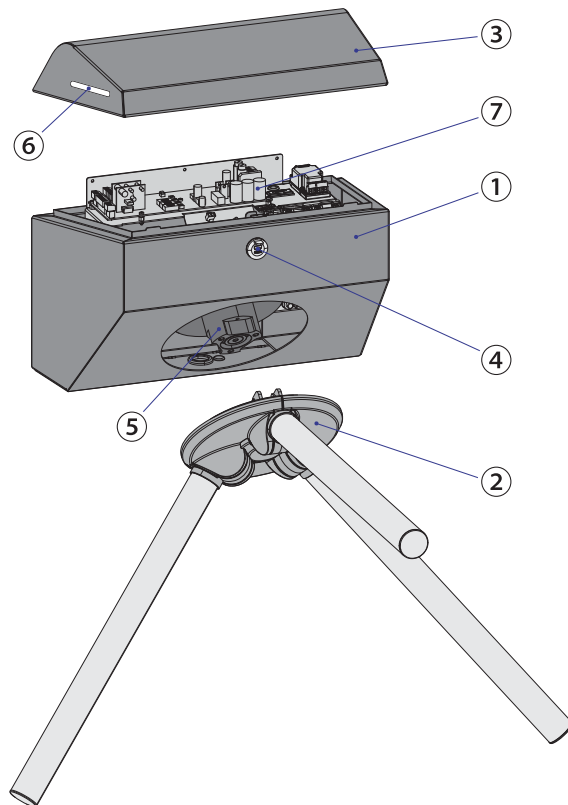
Technical data

Model	PSMM01	PSMM02
Protection rating (IP)		44
Power supply (V - 50/60 Hz)		120/230 AC
Rated power (W)		120
Power in standby mode (W)	4	10
Max transits/minute*		30
Insulation class		I
Weight (kg)	22	25
Operating temperature (°C)		-20 to +55

* Detectable in Free access mode (see F 77 function). In Controlled mode, the times vary according to the access control reading speed.

Description of the components

1. Box
2. Tripod
3. Upper cover
4. Cover lock
5. Mechanism
6. Indicator LED bar housing
7. Control panel



GENERAL INSTALLATION INSTRUCTIONS

△ Installation must be carried out by qualified and experienced personnel in compliance with applicable regulations.

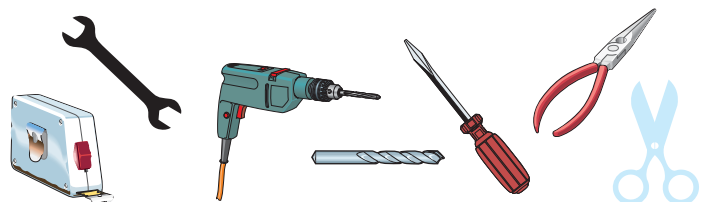
Preliminary checks

△ Before starting installation:

- if necessary, prepare the corrugated pipes to pass the electric cables through;
- provide a suitable single-pole disconnection device, with a maximum of 3 mm between the contacts and an overvoltage category of at least 3, to disconnect the power supply;
- prepare suitable piping and ducts for routing the electrical cables, ensuring protection against mechanical damage;
- ⚡ make sure that any connections within the container (made to ensure the continuity of the protection circuit) are fitted with additional insulation compared to the other internal conductor parts;

Tools and materials

Make sure you have all the tools and materials you will need for the installation at hand to work in total safety and compliance with current standards and regulations. The figure shows some examples of installer's tools.



Cable type and minimum cross-section

Connection	cable length	
	< 20 m	20 < 30 m
Gearmotor with control board	3G x 1.5 mm ²	3G x 1.5 mm ²
Control devices	2 x 0.5 mm ²	2 x 0.5 mm ²
Safety devices	2 x 0.5 mm ²	2 x 0.5 mm ²
24 V accessories	2 x 0.5 mm ²	2 x 0.5 mm ²

With 230 V power supply and outdoor use, use H05RN-F cables compliant with 60245 IEC 57 (IEC); for indoor use, on the other hand, use H05VV-F cables compliant with 60227 IEC 53 (IEC). For power supplies up to 48 V, FROR cables 20-22 II cables compliant with EN 50267-2-1 can be used.

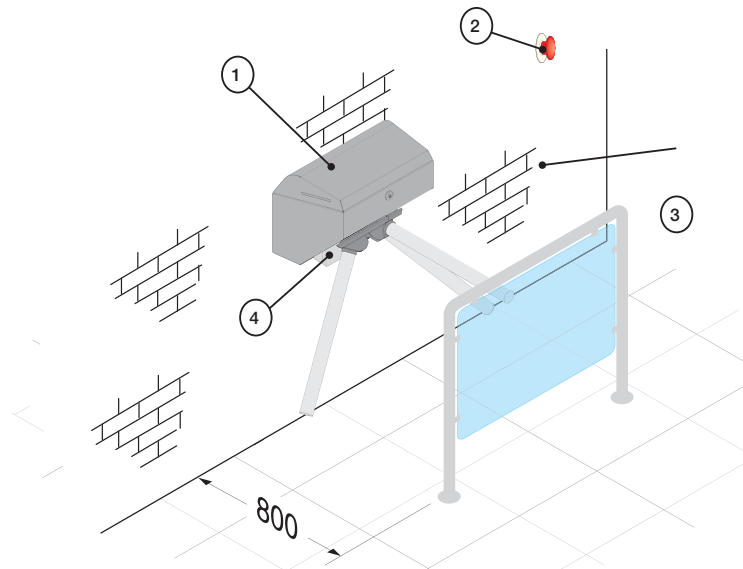
For CRP connection, use UTP CAT5 cables up to 1000 m.

If the cables differ in length compared to what is shown in the table, the cable cross-section is determined according to the actual current draw of the devices connected and according to the provisions of the EN 60204-1 standard.

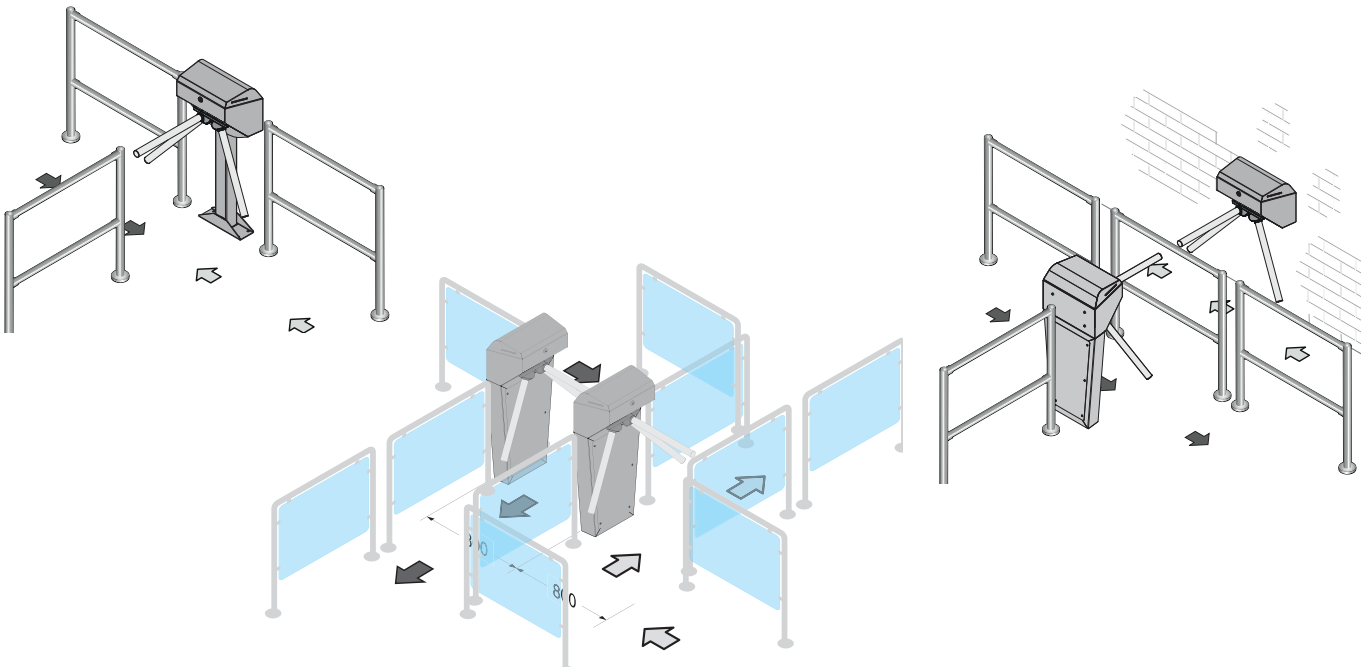
For connections that require several loads on the same line (sequential), the sizes given on the table must be re-evaluated based on actual current draw and distances. When connecting products that are not specified in this manual, please refer to the documentation provided with said products.

Example of a system

1. Single-leg turnstile
2. Emergency button
3. Barrier
4. Junction box



Examples of use



The following illustrations are only examples, given that the space for securing the operator and accessories varies depending on the overall dimensions. The installation technician is responsible for choosing the most suitable solution.

Pay particular attention to the verticality of the wall or the flatness of the floor on which the turnstile is secured.

The location in which to secure the turnstile depends on the size of the opening and any accessories to be connected.

If the turnstile is installed close to a wall, leave at least 5 cm on the opposite side in relation to the tripod.

⚠ The turnstile must be assembled by two people. To transport and lift it, use proper lifting equipment.

⚠ Risk of tipping over or falling! Do not lean on the turnstile until it is fully secured.

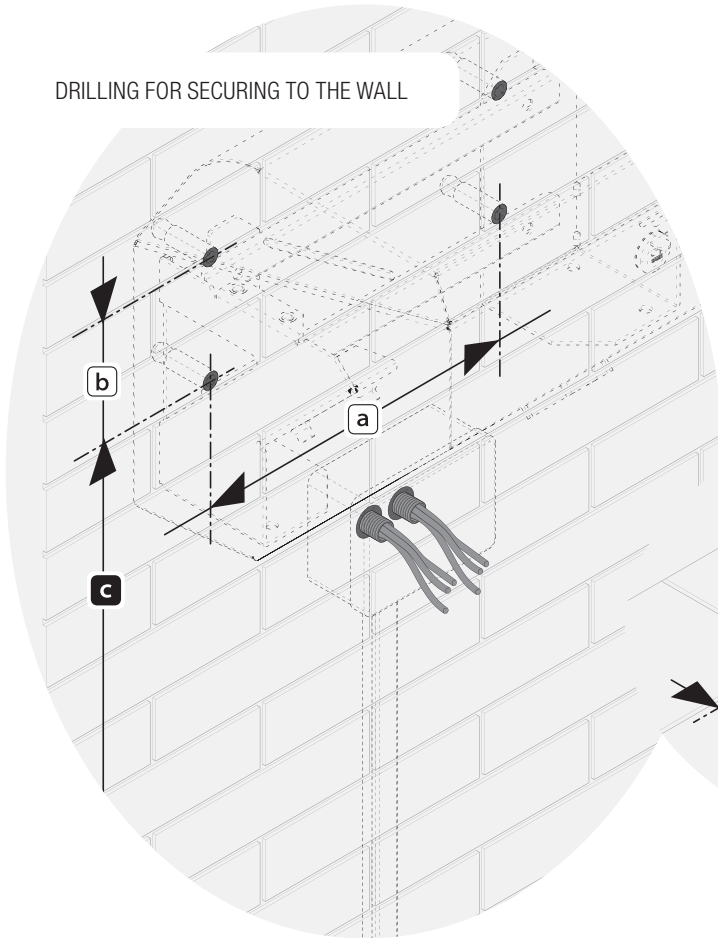
Marking for securing the turnstile

After determining the position, draw axes as shown and mark them with a pencil.

Drill holes at the marked points and insert screw anchors.

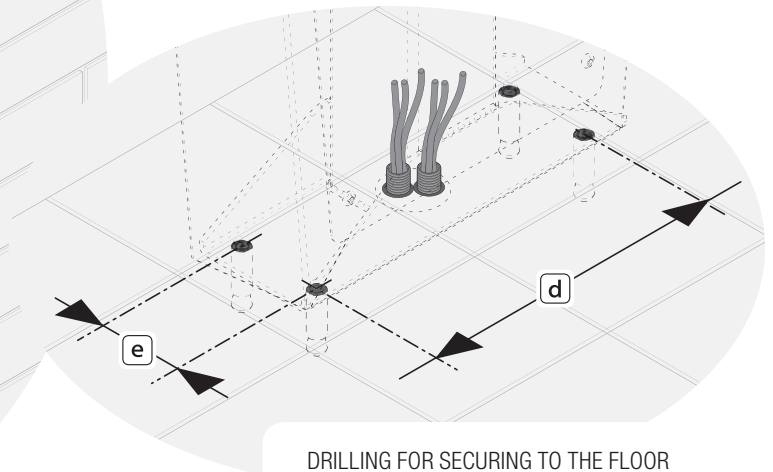
📖 We recommend the use bolts suitable for the type of wall/floor; the holes on the structure are $\varnothing 9$.

DRILLING FOR SECURING TO THE WALL



- a = 270
- b = 100
- c = 746
- d = 250
- e = 70

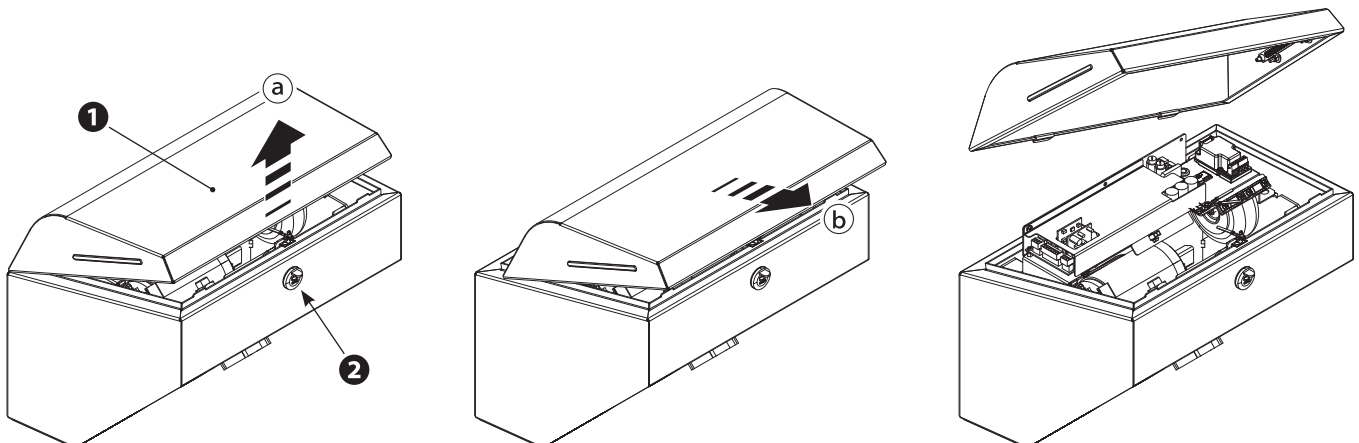
📖 The height from the ground **c** is nominal and can be varied as desired. With the PSMMA-B fixing bracket, with the same final height of the turnstile from the ground, this height must be increased by 3 cm.



DRILLING FOR SECURING TO THE FLOOR WITH LEG

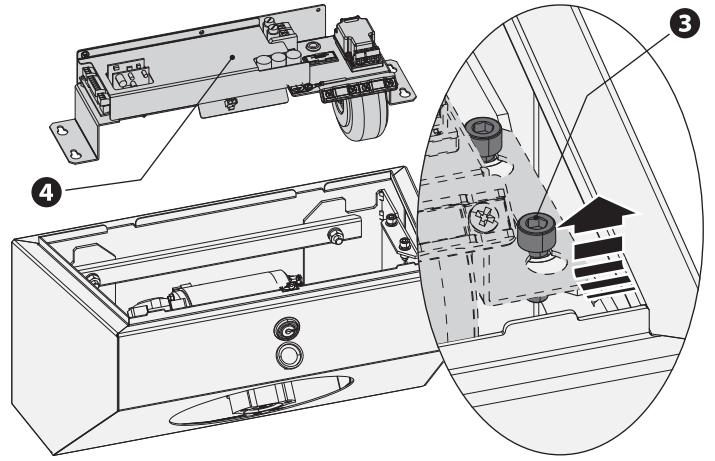
Opening the turnstile

Release the upper cover **1** via the lock **2**; lift it up from the front **a** and pull it forwards **b** to remove it.

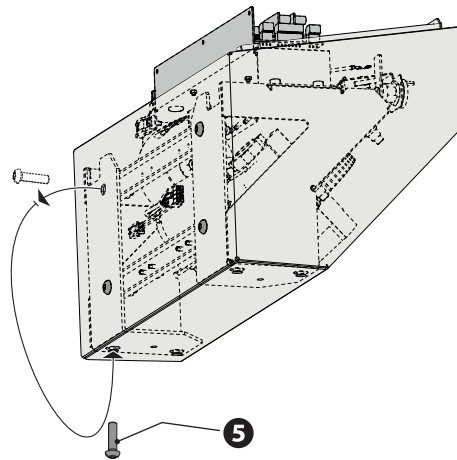


Wall-mounting

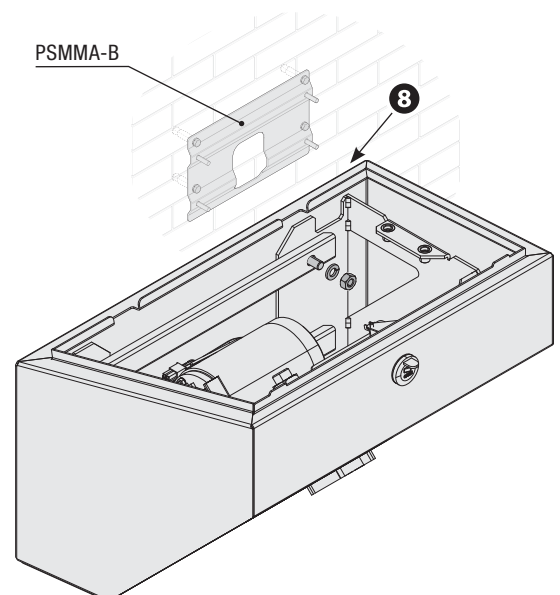
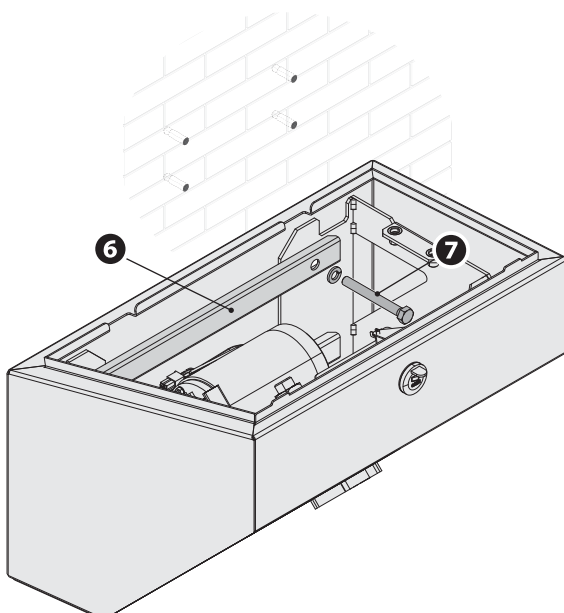
Loosen the 4 screws **3** and remove the power and control unit **4** to access the box fixing wall.



Move the bolts **5** on the bottom of the box, one at a time.

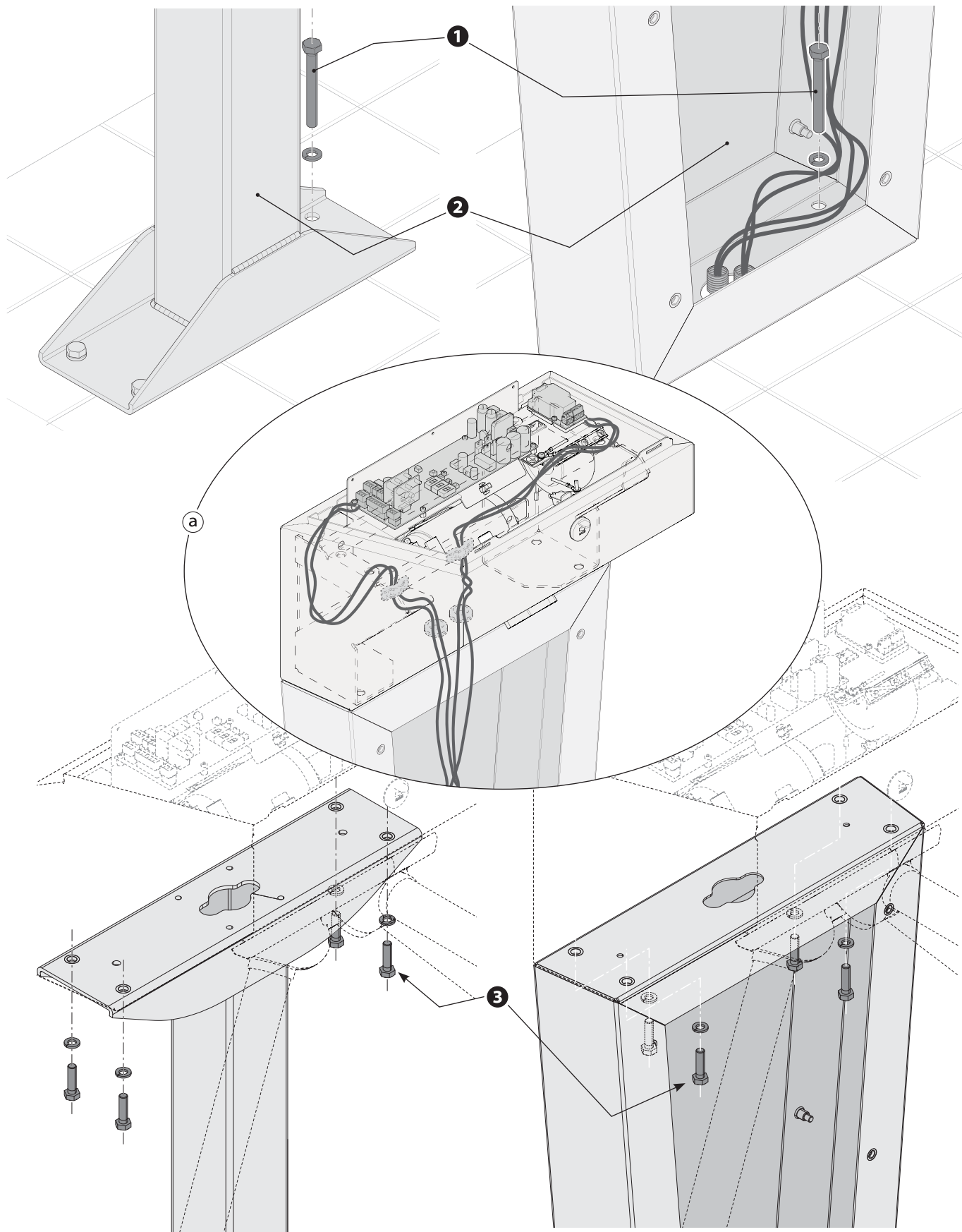


- Without a bracket, secure the turnstile using appropriate bolts to the type of wall **7**, also using the cross bars **6** as reinforcement.
 - With the PSMMA-B fixing bracket, use the nuts and washers provided **8**.
- Insert the connecting cables through the appropriate cable glands.
Replace the power and control unit **4** in the box.



Floor installation

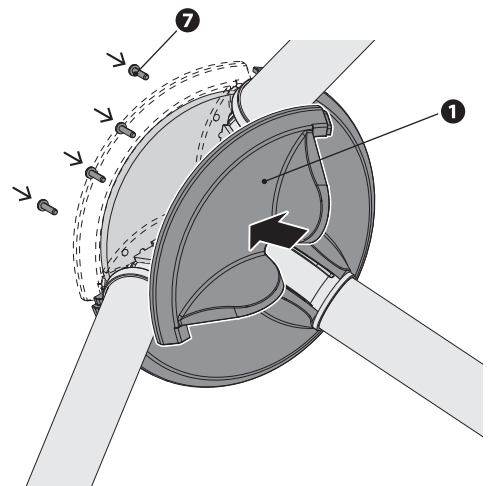
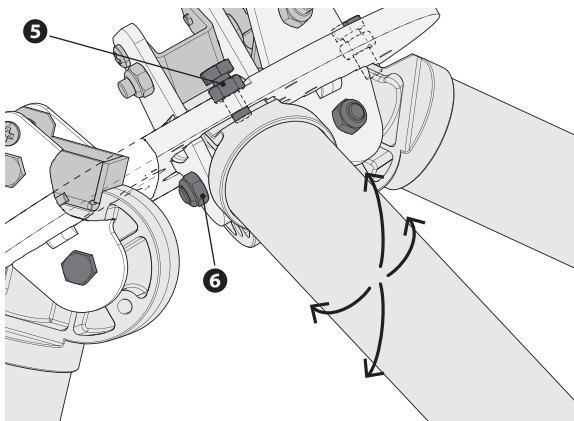
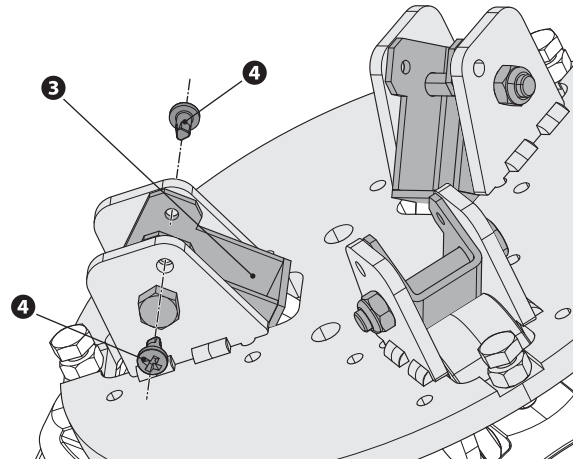
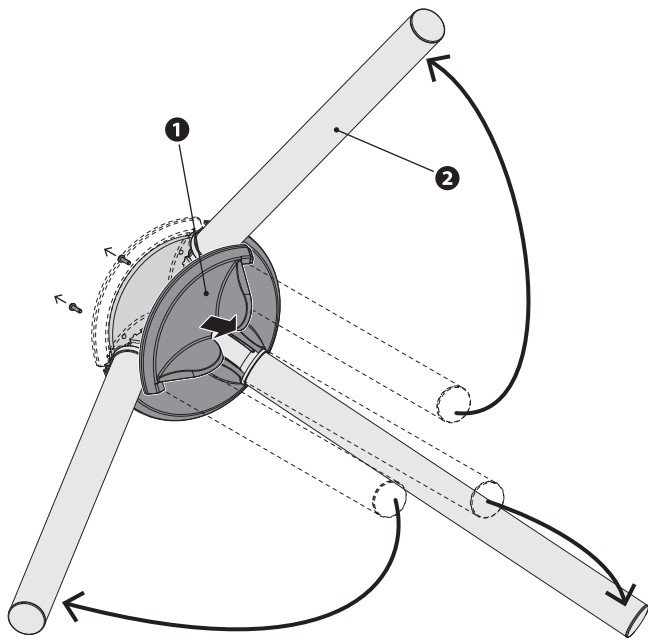
Secure the tubular or boxed single leg to the floor using appropriate bolts **1** (not provided).
Route the cables inside the single leg **2** and, through the relative cable glands, inside the body of the turnstile **a**.
Assemble and secure the body of the turnstile to the single leg using the bolts provided **3**.



Preparing the tripod (for PSMM01 only)

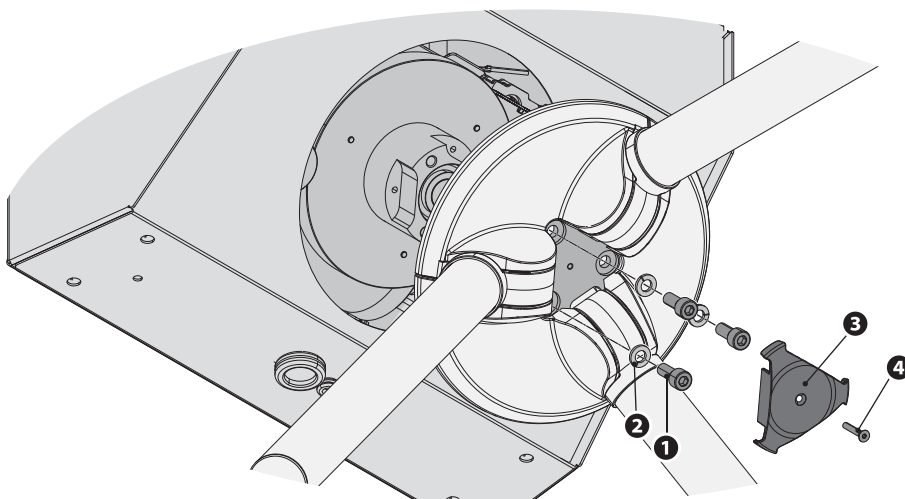
In the standard version with fixed tripod arms, they must be immobilised with the following procedure:

- Remove the 3 ABS covers **1**. Arm the tripod by opening the arms **2** then attach the fixing bracket **3** by turning it.
- Secure the brackets using the M4x8 screws **4**.
- Remove any vertical play with the bolt **5** and side play by firmly tightening the bolt **6**.
- Replace the covers **1** using all the 3.9x16 screws **7**.



Securing the tripod

Secure the tripod to the rotation mechanism using the M8x20 screws **1** and the washers **2**; finally close using the small cover **3** and the M4x25 screw **4**



⚠ Before intervening on the control board, disconnect the line voltage.

Control board power supply (V - 50/60 Hz): 120 - 230 AC.

Control device power supply: 24 V DC.

📖 The output 24 V DC power supply is SELV and so there is no risk of electrocution.

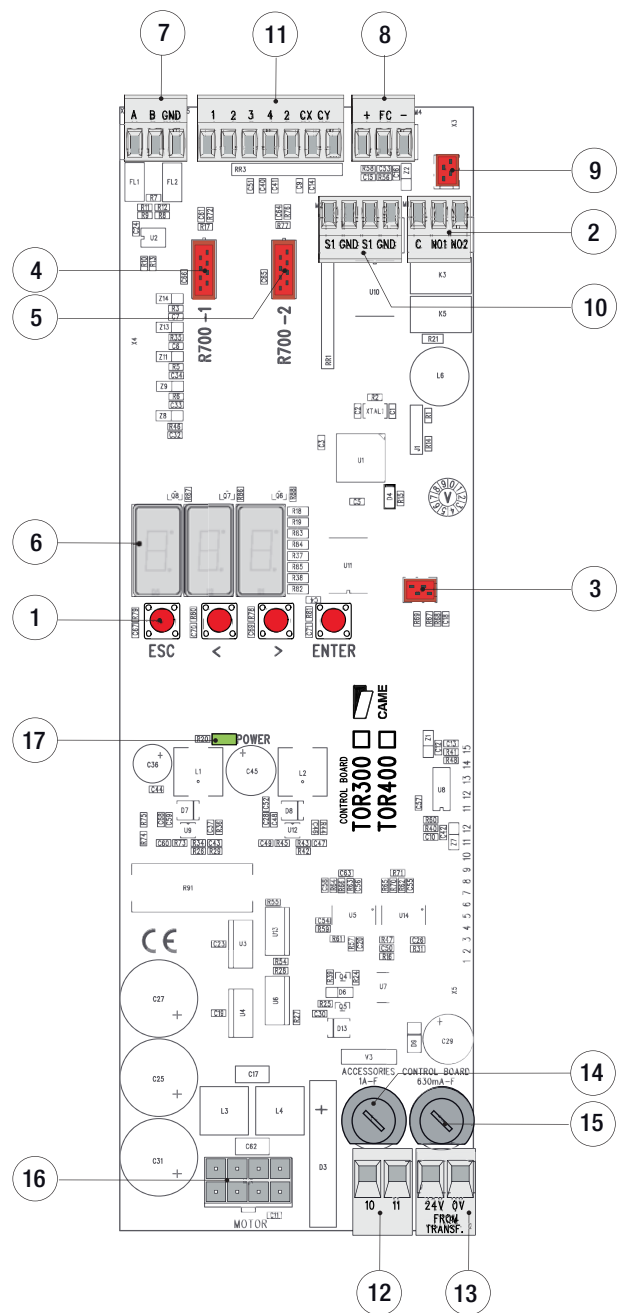
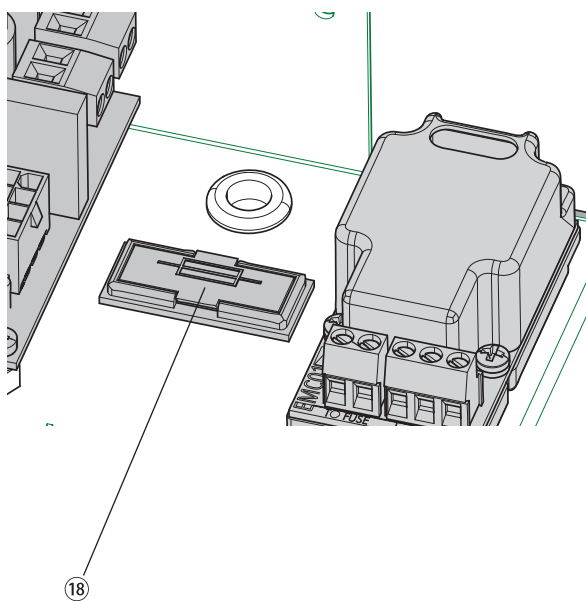
All the connections are protected by quick fuses.

FUSE TABLE

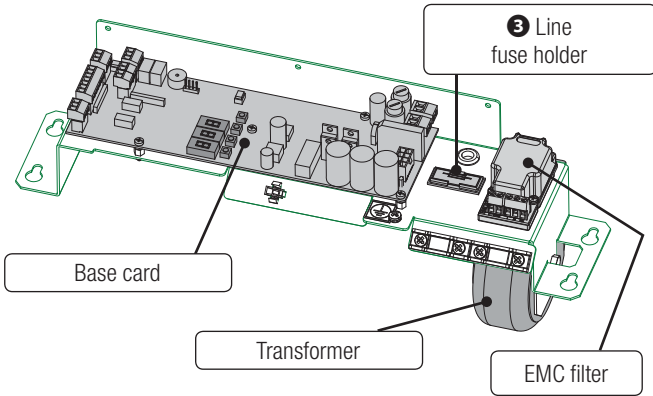
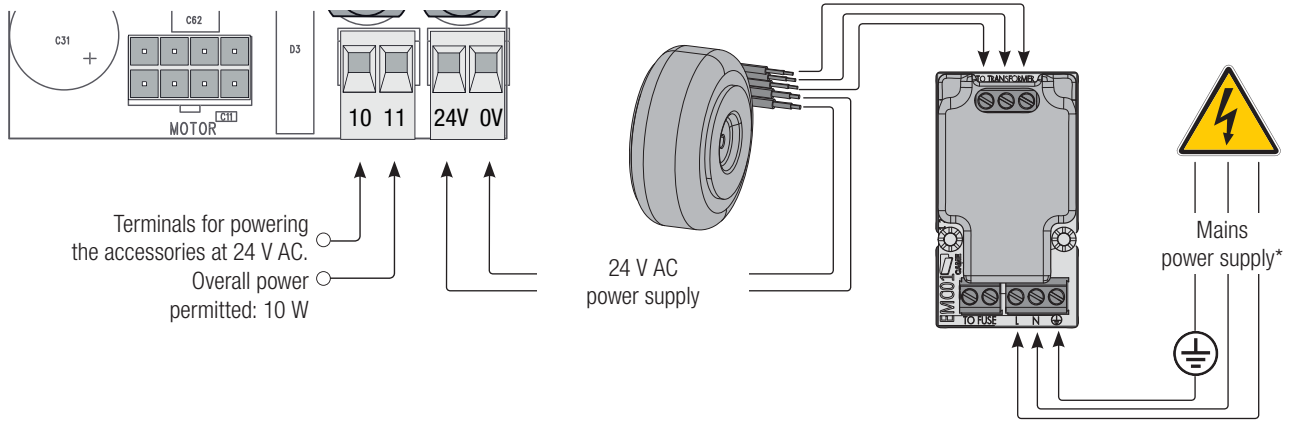
Line fuse	1.6 A-F (230 V) 2 A-F (120 V)
Accessory fuse	1 A-F
Control unit fuse	630 mA-F

Main components

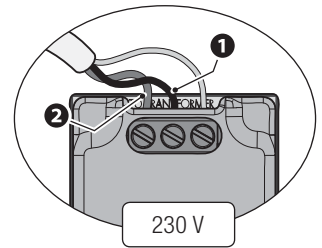
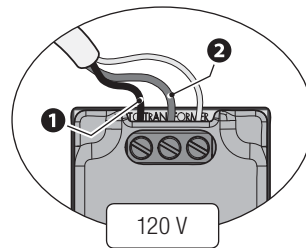
1. Programming buttons
2. Terminal block for operation counter or external siren
3. Memory roll card connector
4. R700 card connector of the first control device
5. R700 card connector of the second control device
6. Display
7. Terminal block for control devices or paired connection
8. Connector for arm rotation sensor
9. Connector for indicator LED bar
10. Terminal block for transponder
11. Terminal block for control devices
12. Accessory power supply terminal block
13. Board power supply terminal block
14. Accessory fuse
15. Board fuse
16. Motor/encoder connector
17. Power indicator LED
18. Line fuse



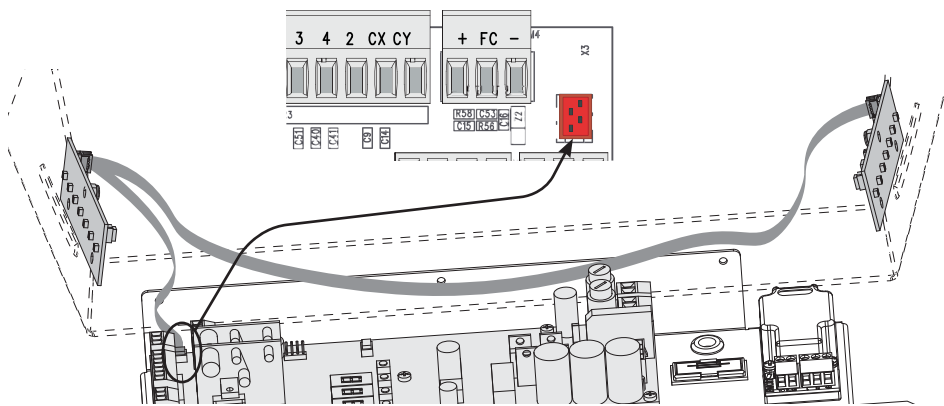
Power supply



* Configured for 230 V power supply.
With 120 V mains power supply, invert cables ① and ② and change the line fuse ③.

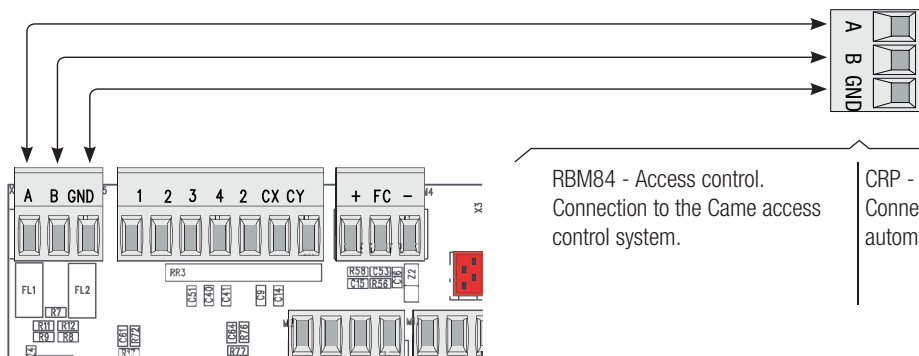


Indicator devices



Optional item PSSMA-A.
Turnstile status indicator LED bars.

Control devices

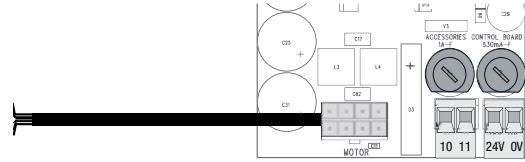


RBM84 - Access control.
Connection to the Came access control system.

CRP - Came Remote Protocol.
Connect to Came home automation systems.

Gearmotor with encoder

24 V DC gearmotor with encoder



Control devices

Stop button (N.C. contact).

Turnstile stop button with exclusion of the automatic closing cycle. To resume movement, activate a control device.

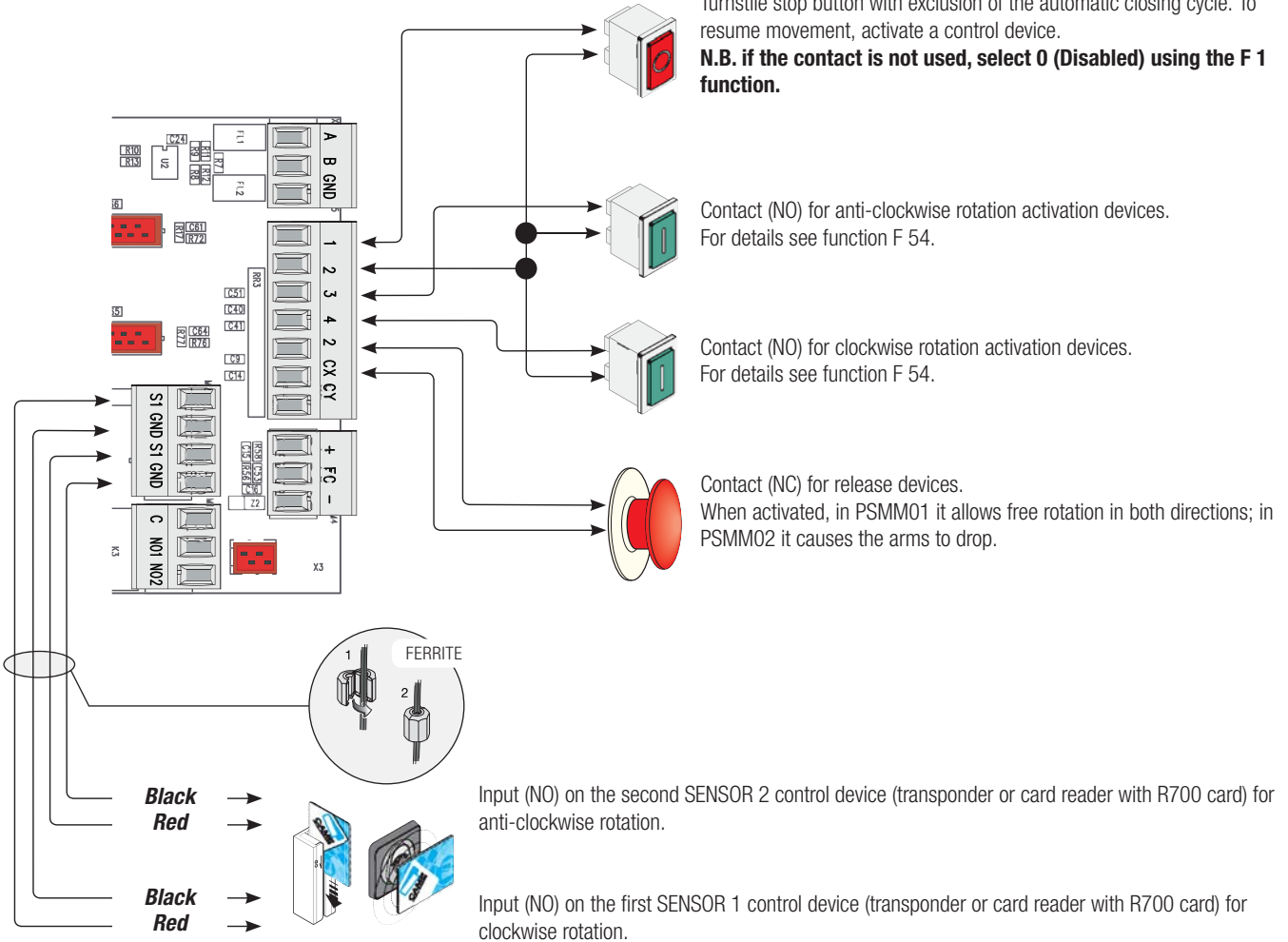
N.B. if the contact is not used, select 0 (Disabled) using the F 1 function.

Contact (NO) for anti-clockwise rotation activation devices. For details see function F 54.

Contact (NO) for clockwise rotation activation devices. For details see function F 54.

Contact (NC) for release devices.

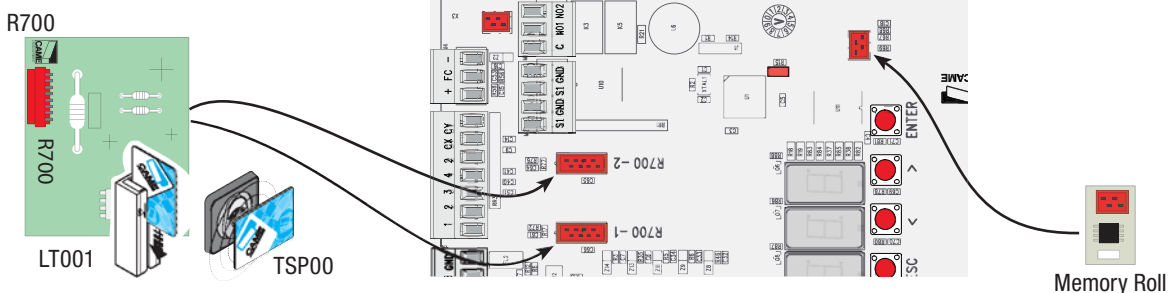
When activated, in PSMM01 it allows free rotation in both directions; in PSMM02 it causes the arms to drop.



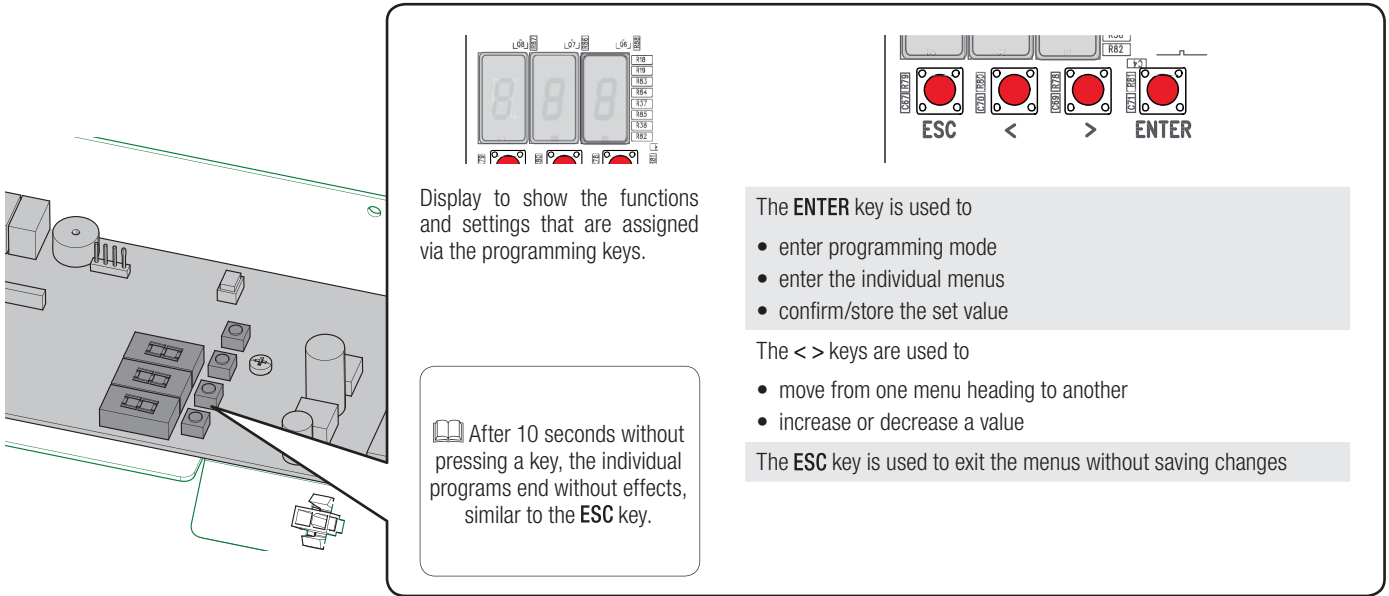
Other connections

The R700 decoding cards are used to control the turnstile with the sensors (TSP00/LT001), the **MEMORY ROLL** to save and load all settings including registered users in another card.

⚠ Before you connect them you MUST cut off the mains voltage and, if present, disconnect the batteries.



Description of programming commands



Display to show the functions and settings that are assigned via the programming keys.

After 10 seconds without pressing a key, the individual programs end without effects, similar to the ESC key.

The ENTER key is used to

- enter programming mode
- enter the individual menus
- confirm/store the set value

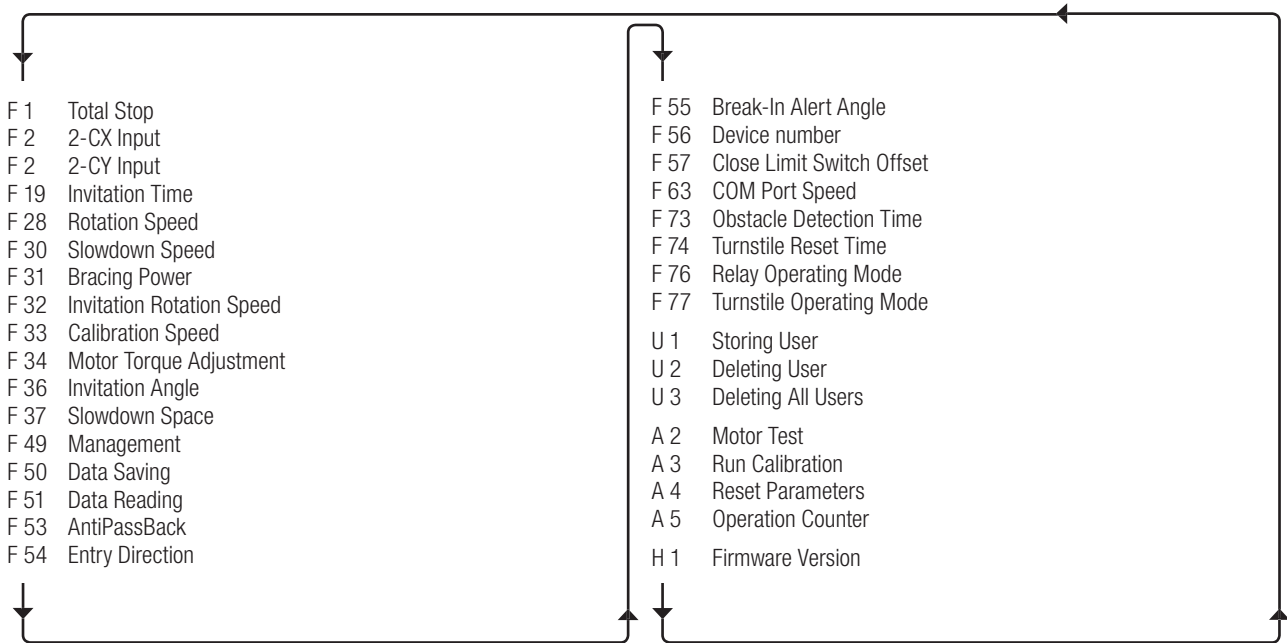
The < > keys are used to

- move from one menu heading to another
- increase or decrease a value

The ESC key is used to exit the menus without saving changes

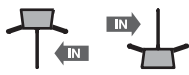

Menu mapping

Start programming by first performing the A 2 Motor test and A 3 Run calibration functions.



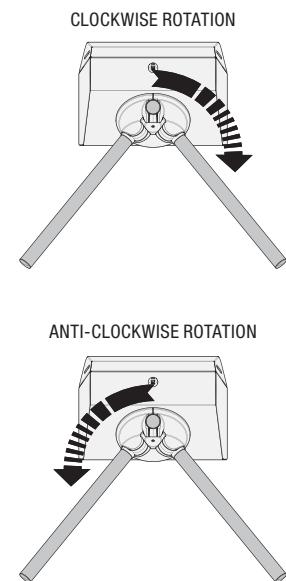
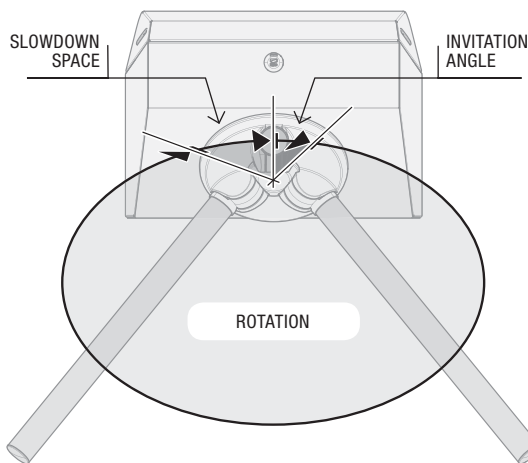
Menu description

Function	Description (default values in negative)
F-1	Total Stop. With button connected to terminals 1-2. [0] To disable it (mandatory if there is no button); [7] to enable it.
F-2	Setup 2-CX Input. Choice of the function activated by the connected device. [0] To disable it; [7] for the arm drop function.
F-3	Setup 2-CY Input. Choice of the function activated by the connected device. [0] To disable it; [7] for the cover lock key function.
F-19	Invitation Time. Wait time after pre-rotation (F 36), after which the turnstile goes back and is ready for a new command. [0] To disable it; [7].....[30] adjustment from 1 to 30 seconds.
F-28	Rotation Speed. Set as a percentage. [50].....[80].....[100] Adjustment from 50% to 100% of motor speed.
F-30	Slowdown Speed Set as a percentage. [15].....[20].....[40] Adjustment from 15% to 40% of motor speed.

Function	Description (default values in negative)																															
F-31	Bracing Power. Setting the force that opposes the turnstile in the event of forcing. [20].....[50].....[50] Adjustment from 20% to 50% of the motor power.																															
F-32	Invitation Rotation Speed Setting the speed during invitation pre-rotation, calculated as a percentage. [15].....[20].....[30] Adjustment from 15% to 30% of motor speed.																															
F-33	Calibration Speed. Setting the speed during the calibration operations, calculated as a percentage. [15].....[20].....[30] Adjustment from 15% to 30% of motor speed.																															
F-34	Motor Torque Adjustment Force applied to the turnstile during normal access. [1].....[5].....[70] from minimum to maximum.																															
F-36	Invitation Angle. Initial pre-rotation of the turnstile after an opening command. [5].....[10].....[30] Angle adjustment from 5 to 30 degrees.																															
F-37	Slowdown Space. Setting the slowdown run, calculated as a percentage. [25].....[30].....[45] Adjustment from 25 to 45% of the total rotation run.																															
F-49	Management. Setting the turnstile management mode. [0] Stand Alone Management; [2] RBM84 access control management; [5] management via CRP (Came Remote Protocol).																															
F-50	Data Saving. Saving of registered users and all settings in the Memory Roll . 🔒 The function only appears with Memory Roll connected. [0] To disable it; [1] to enable it.																															
F-51	Data Reading. Loading all the data from the Memory Roll . 🔒 The function only appears with Memory Roll connected. [0] To disable it; [1] to enable it.																															
F-53	Antipassback. To prevent one card being used for two or more consecutive accesses in the same area. [0] To disable it; [1] to enable it.																															
F-54	Entry Direction. To conform rotation to the direction of entry of the opening. <div style="display: flex; align-items: center; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px;"> <p>[0] For anti-clockwise tripod rotation</p>  </div> <div style="border: 1px solid black; padding: 5px;"> <p>[1] For clockwise tripod rotation</p>  </div> </div>																															
F-55	Break-In Alert Angle Angle of forced rotation, beyond which the turnstile alerts a break-in. [1].....[30] Angle adjustment from 1 to 30 degrees [0] = disabled).																															
F-56	Device Number. If the turnstile is operated by the RBM84 access control (see F-49), it is useful to assign each one a unique number. [1].....[255] Maximum number of turnstiles permitted 255.																															
F-57	Limit Switch Offset. See details in “Limit Switch Offset” chapter. From -10° [-45] to no adjustment [0] to +10° [45].																															
F-63	COM Port Speed. Setting the communication speed of the COM serial port, measured in Baud. [0] 1200; [1] 2400; [2] 4800; [3] 9600; [4] 14400; [5] 19200; [6] 38400; [7] 57600; [8] 115200;																															
F-73	Obstacle Detection Time Push time after which an obstacle is considered to be present. [1].....[5].....[70] Adjustment from 1 to 10 seconds.																															
F-74	Turnstile Reset Time To reset normal turnstile operation after an obstacle has been detected. [1].....[10].....[75] Adjustment from 1 to 15 seconds.																															
F-76	Relay Operating Mode To choose between the counter functions for turnstile operations (<i>relay 1 = anti-clockwise rotation; relay 2 = clockwise rotation</i>) or for the activation of an external device. In both cases, with or without simultaneous activation of the break-in buzzer. [0] Operation counter + Buzzer enabled; [1] Operation counter + Buzzer disabled. [2] Device on C-NO1 enabled + Buzzer enabled; [3] Device on C-NO1 enabled + Buzzer disabled.																															
F-77	Turnstile Operating Mode Setting the activity status for each direction of the traffic. <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>Selection</th> <th>IN (entry)</th> <th>OUT (exit)</th> <th rowspan="9"> KEY: <ul style="list-style-type: none"> • Controlled = transit only permitted to authorised users (green LED on steady); • Free = free transit to all (LED bar flashing green); • Blocked = no transit for anyone (LED bar on steady red). * with PSMM-A accessory assembled </th> </tr> </thead> <tbody> <tr><td>[0]</td><td>Blocked</td><td>Blocked</td></tr> <tr><td>[1]</td><td>Blocked</td><td>Controlled</td></tr> <tr><td>[2]</td><td>Controlled</td><td>Blocked</td></tr> <tr><td>[3]</td><td>Controlled</td><td>Controlled</td></tr> <tr><td>[4]</td><td>Blocked</td><td>Free</td></tr> <tr><td>[5]</td><td>Free</td><td>Blocked</td></tr> <tr><td>[6]</td><td>Free</td><td>Controlled</td></tr> <tr><td>[7]</td><td>Controlled</td><td>Free</td></tr> <tr><td>[8]</td><td>Free</td><td>Free</td></tr> </tbody> </table>	Selection	IN (entry)	OUT (exit)	KEY: <ul style="list-style-type: none"> • Controlled = transit only permitted to authorised users (green LED on steady); • Free = free transit to all (LED bar flashing green); • Blocked = no transit for anyone (LED bar on steady red). * with PSMM-A accessory assembled	[0]	Blocked	Blocked	[1]	Blocked	Controlled	[2]	Controlled	Blocked	[3]	Controlled	Controlled	[4]	Blocked	Free	[5]	Free	Blocked	[6]	Free	Controlled	[7]	Controlled	Free	[8]	Free	Free
Selection	IN (entry)	OUT (exit)	KEY: <ul style="list-style-type: none"> • Controlled = transit only permitted to authorised users (green LED on steady); • Free = free transit to all (LED bar flashing green); • Blocked = no transit for anyone (LED bar on steady red). * with PSMM-A accessory assembled																													
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[3]	Controlled	Controlled																														
[4]	Blocked	Free																														
[5]	Free	Blocked																														
[6]	Free	Controlled																														
[7]	Controlled	Free																														
[8]	Free	Free																														
U-1	User Storage. Up to 150 users. See details in “Entering a user” chapter.																															
U-2	User Deletion. See details in “Deleting a user” chapter.																															

Function	Description (default values in negative)
U-3	Deleting All Users Deleting all stored users. After deletion, the message [CLR] appears. [0] To disable it; [7] to delete all users.
A-2	Motor Test Test to check for correct tripod rotation. [0] To disable it; [7] to enable it.
A-3	Run Calibration See details in "Run calibration" chapter. [0] To disable it; [7] to enable it.
A-4	Reset Parameters. Deletion of all programming (including the run calibration) and return to the default parameters. [0] To disable it; [7] to reset all the default parameters.
A-5	Operation Counter. This enables you to view the number of operations performed or forcing attempts. [0] For forcings; [7] for operations.
H-1	Firmware Version. Shows the firmware version. For example [7.0]

Definitions



Run calibration

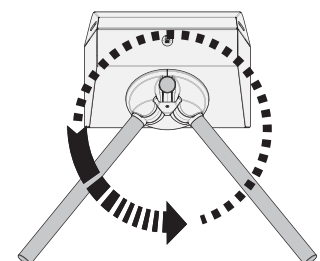
- Before calibrating the run, check that the manoeuvre area is free from any obstacle.
- During calibration, all safety devices will be disabled except for the Total Stop device.

Activate procedure A 3.



The card will make the tripod perform a complete 360° calibration rotation, recording the 3 stop positions of the arms.

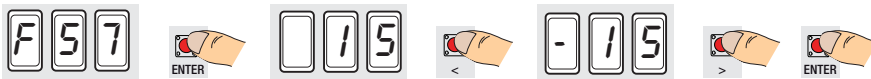
At the end, the display will indicate registration in progress for a few seconds with these screens and then automatically exit the procedure.



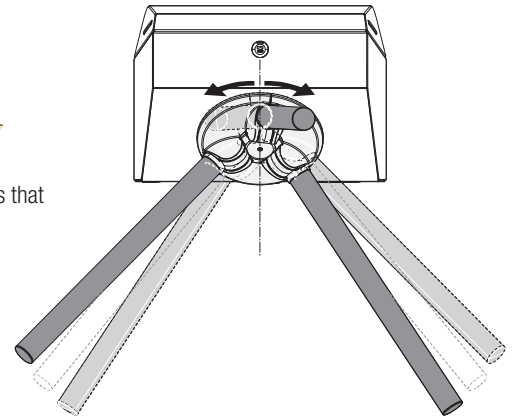
Limit switch offset

After the run calibration, the limit switch offset operation further adjusts the rotation of the arms on the perpendicular, as illustrated.

Activate procedure F 57.

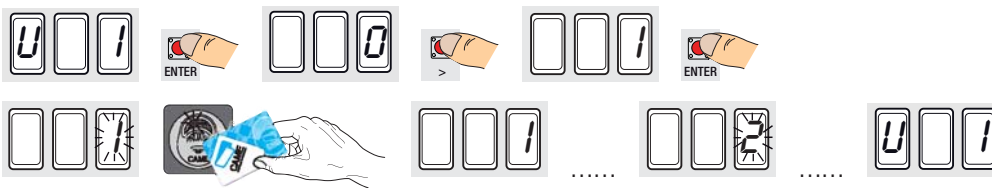


Press > or < to adjust the arm stop position by 15° more or less (to compensate any flooring or fixings that are not perfectly horizontal).



User storage (max. 150)

Activate procedure U 1 and select 1 to activate user storage.



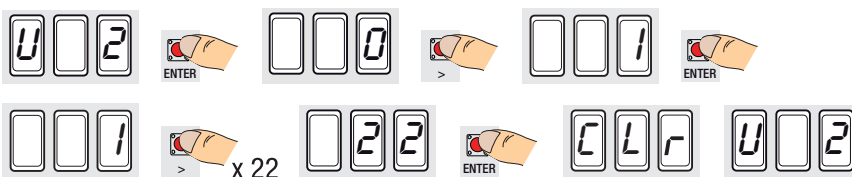
The first free position for storage will appear flashing*: pass the card or cards in front of the transponder sensor; the number of the last card will remain lit for a few moments to register the users. At the end, the next free number will flash.

At the end of the manual, there is a table in which to list users for easier management.

* When adding/deleting users, the numbers displayed flashing are numbers that are available and can be used for users to be added.

Deleting a single user

Activate procedure U 2 and select 1 to activate user deletion.



Use the arrow keys to move to the user to delete and press Enter: the wording CLR will flash for a few seconds and the procedure will terminate automatically. For another deletion, repeat the procedure.

To delete all the users, use function U 3 (see menu detail).

Deleting all users

Activate procedure U 3.

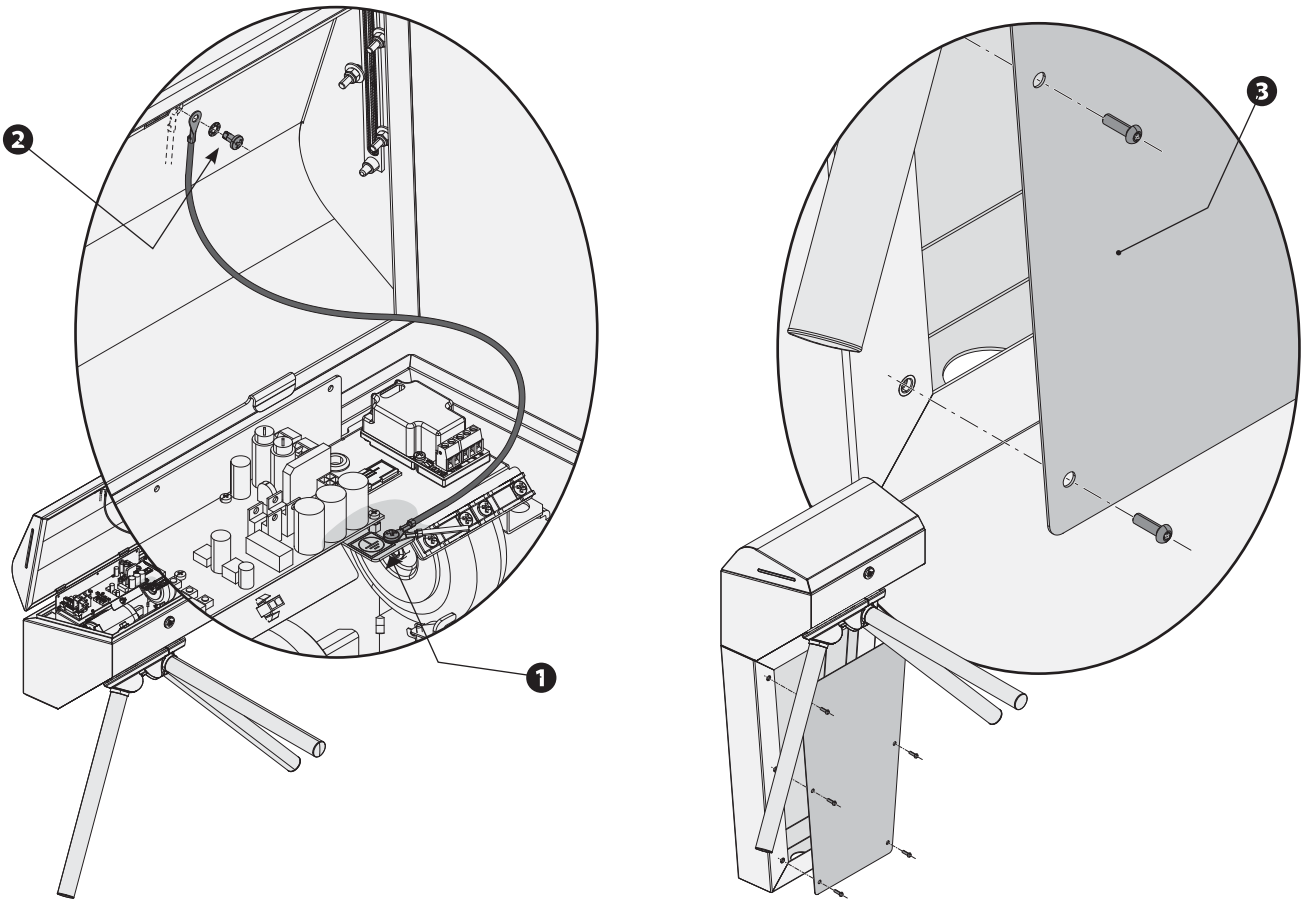


Select 1 and press Enter to delete all stored users at the same time: the wording CLR will flash for a few seconds and the procedure will terminate automatically.

FINAL OPERATIONS

Once electrical connection and commissioning have been completed, connect the earthing cable supplied attached to point **1** to the cover in the point indicated, using the bolts supplied **2**.

If fitted with the boxed leg, assemble the closing plate **3**.



MAINTENANCE

 Before any maintenance, disconnect power to prevent any dangerous situations that may be caused by accidental movement.


 For correct maintenance of the AISI 304 steel (tripod arms), refer to the section about cleaning steel in the 119RW48 manual.

Table of the mean number of cycles between failures (MCBF) for StileOne turnstiles, considering correct installation and maintenance as described in this manual:

Model	Operating limits	MCBF
001PSMM01	Maximum number of cycles per day: continuous service	3,000,000
001PSMM02	Maximum number of cycles per minute: 30 (1 cycle every 2 seconds)	

Periodic maintenance

• **Every 1,000,000 cycles and in any case every 6 months:**

- Check the tightness of the bolts
- Check the tightness of the tripod head bolts
- Check the efficiency of the arm drop

Troubleshooting

PROBLEM	POSSIBLE CAUSES	CHECKS AND SOLUTIONS
The turnstile does not accept commands	<ul style="list-style-type: none"> • No power • Stop button open 	<ul style="list-style-type: none"> • Check for mains power • Check that the button is intact/suitable

Error messages and warnings during installation

ERROR	CAUSE	SOLUTIONS
E 1	<ul style="list-style-type: none"> • Calibration aborted 	<ul style="list-style-type: none"> • Repeat calibration
E 2	<ul style="list-style-type: none"> • Incorrect calibration 	<ul style="list-style-type: none"> • Repeat calibration
E 3	<ul style="list-style-type: none"> • Encoder broken 	<ul style="list-style-type: none"> • Replace the encoder
E 7	<ul style="list-style-type: none"> • Run time expired 	<ul style="list-style-type: none"> • Check the operation of the gearmotor
E 8	<ul style="list-style-type: none"> • Hatch open 	<ul style="list-style-type: none"> • Close the cover
E 9	<ul style="list-style-type: none"> • Obstacle during the return from the opening rotation (see function F-36) 	<ul style="list-style-type: none"> • Remove the obstacle
E 10	<ul style="list-style-type: none"> • Obstacle during the opening rotation 	<ul style="list-style-type: none"> • Remove the obstacle
E 20	<ul style="list-style-type: none"> • Arm dropped 	<ul style="list-style-type: none"> • Reset the arm

Indications of the indicator LED bar

Individual LED status	Description
	<ul style="list-style-type: none"> • FREE entry
	<ul style="list-style-type: none"> • CONTROLLED entry
	<ul style="list-style-type: none"> • BLOCKED entry
	<ul style="list-style-type: none"> • Calibration in progress
	<ul style="list-style-type: none"> • Stop button activated
	<ul style="list-style-type: none"> • FREE entry with ongoing error
	<ul style="list-style-type: none"> • CONTROLLED entry with ongoing error
	<ul style="list-style-type: none"> • BLOCKED entry with ongoing error
	<ul style="list-style-type: none"> • Ongoing error during calibration
Key:	
	Steady red
	Flashing red
	Quick flashing red
	Steady green
	Flashing green

DISMANTLING AND DISPOSAL

CAME S.p.A. implements an EN ISO 14001 certified and compliant Environmental Management System at its plants, to ensure environmental protection. Please continue our efforts to protect the environment, something that CAME considers to be one of the foundations in developing its business and market strategies, simply by observing brief recommendations as regards disposal:

DISPOSAL OF PACKAGING

Packaging components (cardboard, plastic etc.) can be disposed of together with normal household waste without any difficulty, by simply separating the different types of waste and recycling them.

Before proceeding, it is always advisable to check specific regulations in force in the place of installation.

DISPOSE OF PROPERLY!

DISPOSAL OF THE PRODUCT

Our products are made with different materials. Most of them (aluminium, plastic, iron, electrical cables) can be disposed of together with normal household waste. They can be recycled if collected, sorted and sent to authorised centres.

Other components (control boards, transmitter batteries etc.) on the other hand, may contain pollutants. They should therefore be removed and handed over to companies authorised to recover and recycle them.

Before proceeding, it is always advisable to check specific regulations in force in the place of disposal.

DISPOSE OF PROPERLY!

REGULATORY REFERENCES

The product complies with the applicable reference directives.

LIST OF REGISTERED USERS

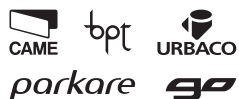
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English - Manual code: **FA00151-EN** - ver. **2** - 08/2016 - © Came S.p.A.
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safety&comfort



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