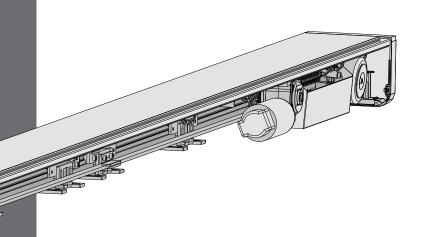


T-LINE



D-MNLOTLINE 23-05-2023 - Rev.16

IT - Istruzioni originali









The manufacturer reserves the right to modify or improve products without prior notice. Any inaccuracies or errors found in this handbook will be corrected in the next edition.

When opening the packing please check that the product is intact. Please recycle materials in compliance with current regulations.

This product may only be installed by a qualified fitter. The manufacturer declines all liability for damage to property and/or personal injury deriving from the incorrect installation of the system or its non-compliance with current law (see Machinery Directive).

GENERAL SAFETY RECOMMENDATIONS

Only begin to install the device after you have carefully read this instruction manual.

Both the mechanical part and the electrical part must be installed in a perfectly workmanlike manner, in compliance with the current laws in force. Failure to comply with these latter may result in danger hazards for persons or property.

The installer must be a competent person who has been adequately trained. He must check to make sure that the structure on which the actuator is installed is strong and stable. If necessary, structural modifications must be made to strengthen it. The installer must also check that all zones where there is a risk of crushing, dragging, shearing or other dangers, are protected by means of electronic safety devices, safety freeboards or barriers. These devices must be installed in compliance with the current laws and in a perfectly workmanlike way, also in relation to the place of use, the type of use and the operating logic of the product. The forces developed by the complete system as it operates must comply with the current standards and, where this is not possible, the zones affected by these forces must be protected with electronic safety devices. Moreover, dangerous zones must be indicated, as established by the current laws in force.

Before the actuator is connected, make sure that the electricity main possesses characteristics that are compatible with those described in the technical specifications of this manual, and that there is a differential circuit-breaker and adequate protection against overcurrents on the supply side of the system. Remember to turn off the power supply before installing or servicing the actuator and whenever the cover must be opened.

Electrostatic charges can damage the electronic components on the boards. Wear a grounded antistatic bracelet if you must work on the electronic boards. Never place the hands or other parts of the body in moving parts, such as belts, pulleys, carrelli,

Servicing the actuator is of fundamental importance if the system is to operate correctly and safely. It is advisable to periodically inspect all parts every 6 months, to make sure they operate in an efficient way.

The manufacturer declines all liability for improper installation or use of the product, or for damage deriving from unauthorized modifications to the system. Only use genuine spare parts if replacements or repairs are required. The manufacturer cannot be held liable for the way the doors or gates to be automated are constructed, or for damages caused by failure to build the doors and gates in compliance with good workmanlike techniques.

Protection degree IP10 requires that the actuator only be installed inside buildings. The manufacturer declines all liability for damage caused by assembly on the outside, without adequate protections.

Always make sure that the product is in a good condition before it is installed.

This product cannot be installed in places with an explosive atmosphere or in the presence of inflammable fumes or gases.

This product must be disposed of according to the current laws in force at the end of its useful life.

Do not leave parts of the product or its packaging within children's reach, as they could become a danger hazard.

Do not stay within the door movement range and do not deliberately try to stop the door movement.

Do not allow children to stay or play within the door movement range.

MACHINE DIRECTIVE

As established by the EU commission, automated pedestrian closing systems are governed by the machine directive (2006/48/ EC). This latter specifies that the installer who fits a driving system on a door or gate has the same obligations as the manufacturer of the machine. Thus, he must:

- 1. Prepare the technical report (complete with the documents described in annex VII of the Machine Directive).
- 2. Compile the relative CE conformity certificate (as per annex II-A of the Machine Directive).
- 3. Affix CE marking to the motorized door or gate (1.7.3, of annex I of the Machine Directive).

The installer must keep the technical report at the disposal of the competent authorities in the country for at least 10 years, running from the date on which the motorized door or gate was manufactured.

The installer must consign the following documents to the customer:

- 1. Instructions on how to operate and safely use the system.
- 2. The routine maintenance instructions.
- 3. The declaration of conformity.

MAINTENANCE PROGRAM

Each 6 month:

Attention! Before work on the operator cut main power line.

- Check that all securing screws are well tightened.
- Check the tension of the belt.
- Clean the carriages sliding guide and the ground sliding guide.
- Check that carriages and wings are correctly aligned and stop are properly positioned.
- Check that elettrolock, if present, are correctly fitted and that mechanical unlock system work fine.
- Check wiring connections.
- Check that door wings are stable and the movement is steady, without friction from full open to full close position.
- Check that speeds, timing, and safety functions are well set.
- lean sensors and check that safety and activation sensor are properly functioning.

Attention! Any part that appear damaged or worn must be changed.

For spare parts see the spare part list.

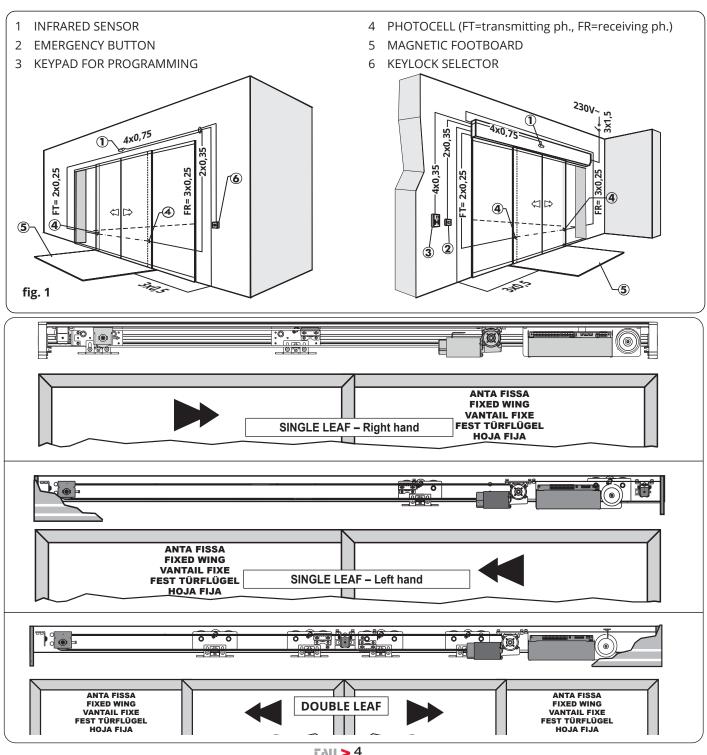
INDEX

1_	TECHNICAL FEATURES	pag.	4
2_	TYPICAL SYSTEM	pag.	4
3_	AUTOMATION SECTION AND REFERENCES	pag.	5
4_	LEAF DIMENSIONS AND STANDARD REFERENCES	pag.	7
5_	CROSSBAR ANCHORING	pag.	8
6_	ANCHORING THE LEAF SLIDING PLATE	pag.	9
7_	FIXING LEAVES TO THE CARRIAGES AND ADJUSTMENT	pag.	9
8_	ANCHORING THE LEAVES TO THE CARRIAGES THROUGH THE SUPPORT KIT FOR FRAMED LEAVES (10T-LINEANT)	pag.	9
9_	POSITIONING THE BRAKE BUMPER	pag.	10
10_	COUPLING THE CARRIAGE WITH THE TRANSMISSION BELT WITH SINGLE LEAF	pag.	11
11_	ADJUSTMENT BELT TENSION AND EASY OPENING OF CARTER	pag.	11
12_	FIXING AND ADJUSTING ELECTRIC LOCK AND EMERGENCY MANUAL RELEASE	pag.	11
13_	SETTING OF THE COMPONENTS AND INSTALLATION OF THE SINGLE LEAF, RIGHT OPENING SLIDING DOOR	pag.	14
14_	COUPLING THE CARRIAGE WITH THE TRANSMISSION BELT WITH SINGLE LEAF	pag.	15
15_	POSITIONING THE BRAKE BUMPER	pag.	15
16_	ADJUSTMENT BELT TENSION AND EASY OPENING OF CARTER	pag.	16
GUARANTEE			16
MANUFACTURER'S DECLARATION OF INCORPORATION			17

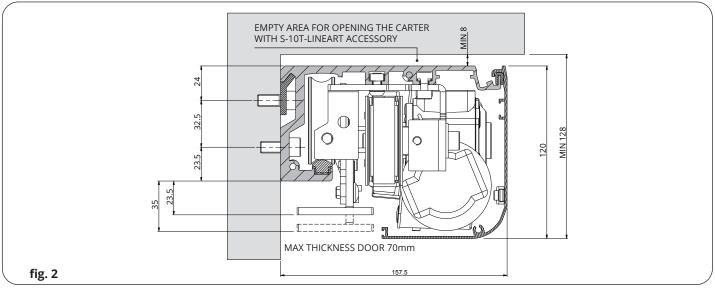
1. TECHNICAL FEATURES

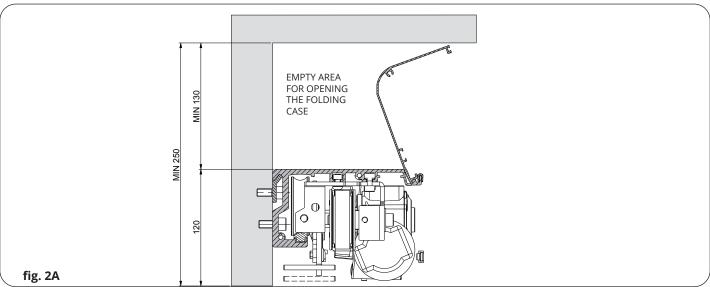
TECHNICAL DATA	T-LINE
Power rating	140 Watt
Max. door weight	1 wing 150 daN (Kg) - 2 wings 130 daN (Kg) per wing
Opening speed	70 cm/s (for wing)
Closing speed	50 cm/s (for wing)
Voltage input	230 Vac ± 10% 50-60 Hz
Type of work	Continuos (100%)
Operating temperature	-20°C ÷ +50°C
Carriages	2 wheels Ø 65 mm + 1 wheels antilift
Beam dimensions	160 x 120 x 6000 mm (max. length)
Degree of protection	IP 12
Electric motor	40Vdc with encoder
Ext. accessories power supply	12 and 24Vac

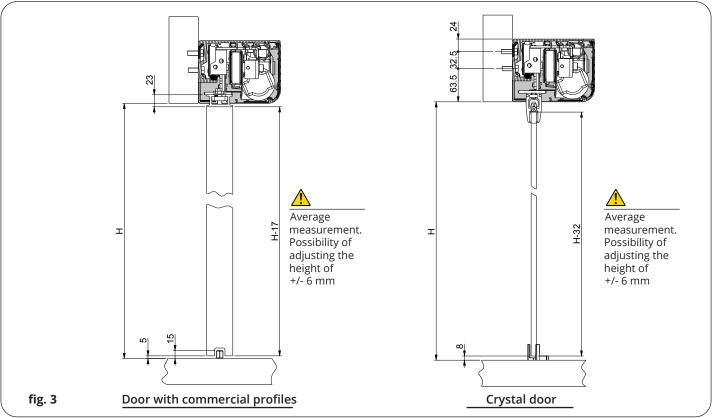
2. TYPICAL SYSTEM

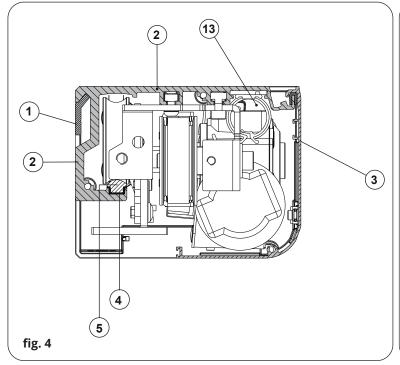


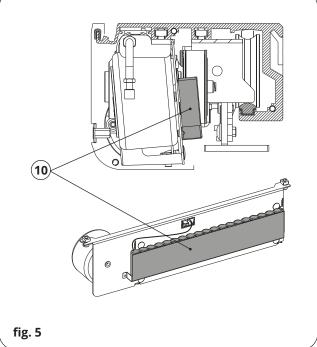
3. AUTOMATION SECTION AND REFERENCES

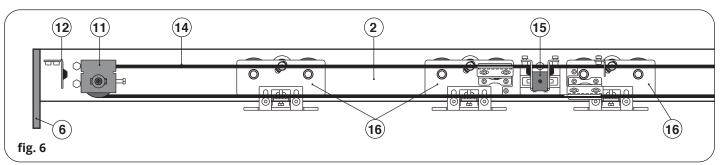


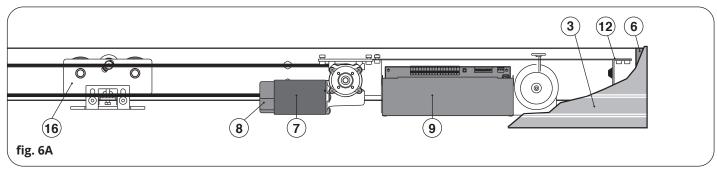










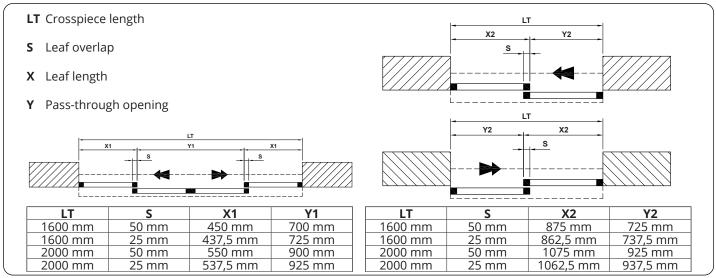


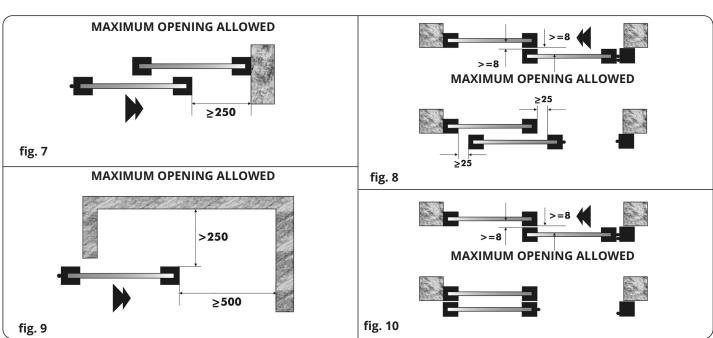
- 1 Anchoring Profile
- 2 Aluminum Bar
- 3 Aluminum Cover
- 4 Soundproof Guide
- 5 Aluminum scrolling rail
- 6 Side Panels
- 7 Gear Motor
- 8 Encoder

- 9 Electronic equipment with transformer
- 10 Battery
- 11 Pulley Transmission
- 12 Braking Pad
- 13 Grommets
- 14 Timing Belt
- 15 Electric lock (optional)
- 16 Trolleys

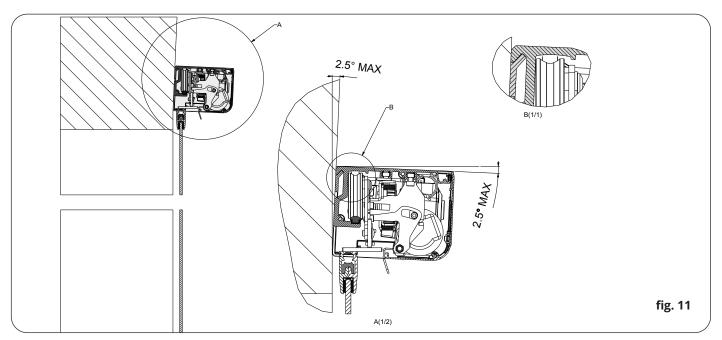
4. DIMENSIONE DELLE ANTE E RIFERIMENTI NORMATIVI

For proper door operation, the carriage centre distances and the distance between the carriages and the end of the door frame must be observed, as shown in **fig. 14-15**.





In order to ensure the proper operation of the automation, the wall must be as much flat and vertical as possible. Please check figure 11 for the maximum tilt angle



Refer also to pictures 6, 7, 8 and 9 regarding the safety clearance regulations to be observed.

5. CROSSBAR ANCHORING (fig. 12)

The profile must be secured to a flat surface with adequate strength to the weight of the leaves that are going to use. If the wall or the support you are using does not respond to these features you will have to prepare an adequate iron structure because **the profile is not self-supporting**.

We recommend the use of the level to avoid the off-axis mounting of the profile.

Fix the anchoring profile (A) to the wall or to the support via the M8 steel anchors. The attachment points must be **drilled every 600 mm**.

Drill the rafter (**B**) from behind placing it on two trestles in order **not to compromise sliding track** (**C**). The attachment points **should be made each 600mm**. Hook the rafter (**B**) to the anchor profile (**A**) and mark the wall through the holes on the beam, then, remove the rafter (**B**) and drill the wall. At this point again attach the rafter to the anchor rails and secure the rafter to the wall using the M8 steel anchors.



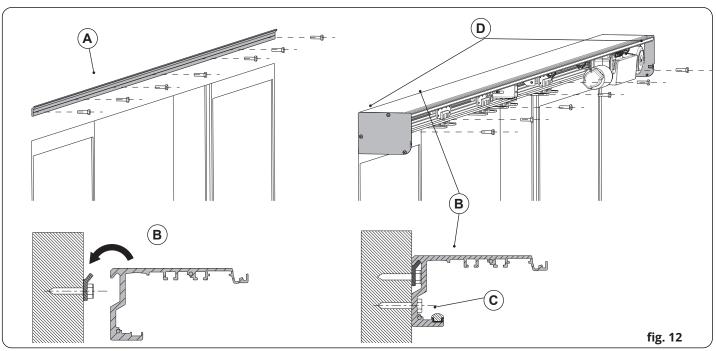
Be careful when drilling of the rafter and the wall to avoid damaging sliding track (C) as it would compromise the functionality and the quietness



After fastening the rafter, clean by means of a brush or a small vacuum cleaner, the sliding zone interested by the drilling residues.



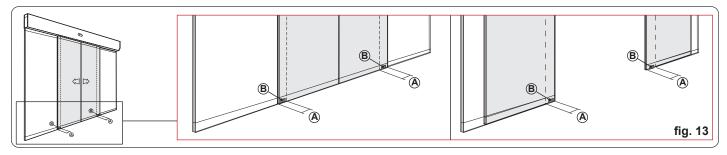
If you encounter obstacles to the ends of the automatic door you must mount the end caps (D) before fix the beam to the wall.



6. ANCHORING THE LEAF SLIDING PLATE (P-10T-LINE1250 AND P10T-LINE1240)

The sliding plate must be installed on every leaf before the final assembling on the automation.

- 1) Detect the size A (fig. 13) in which the leaf is always present on the opening/closing trajectory.
- 2) Place the plate B (fig. 13) on the ground within the value of the size A, pierce and fix.

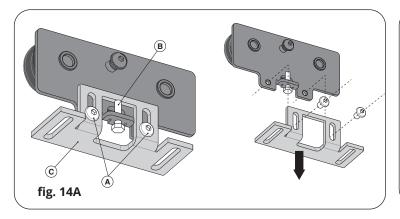


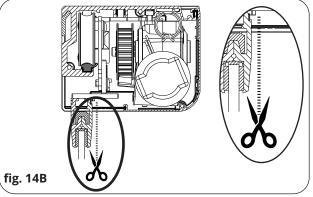
7. FIXING LEAVES TO THE CARRIAGES AND ADJUSTMENT (FIG.14)

- 1) Unscrew the two screws (A) of each carriage and remove the mobile part of this (C) as described in Figure 14.
- 2) Fix the disassembled mobile part (C) of the two carriages at the same distance from the outer edge as indicated in Figure 16 or 17.
- 3) Now you can hang on the door doing the reverse of the one described in Figure 14. Now tighten the screws (A) in their seats without forcing.
- 4) Once you have set the desired height of the leaf through the adjustment screw (B), strong tighten the two screws (A).
- 5) The horizontal adjustment leaf is carried out by means of the slots present in the mobile of the carriage.
- 6) Cut the rubber gasket close to the frame as shown in Figure 14B.



In the absence of electric lock (optional) skip to the next paragraph, otherwise strictly follow the instructions below.



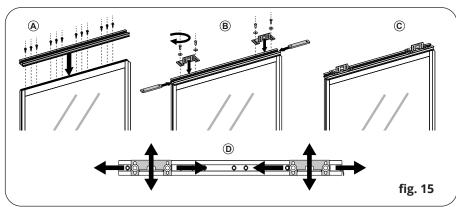


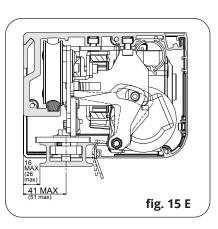
8. ANCHORING THE LEAVES TO THE CARRIAGES THROUGH THE SUPPORT KIT FOR FRAMED LEAVES (10T-LINEANT)

- 1) Lay the support kit for framed leaves (10T-LINEANT) on the upper part of the frame and fix it with the provided screws (fig. 15-A).
- 2) Place the counterplates on the track of the support kit against the mobile part of the carriages (fig. 15-B-C). Fix them through screws at the distance shown in figure 16-17. Once the closing carriage is placed at the maximum size from the edge of the leaf (as per figure 16 or 17), set the opening carriage at the same distance from the edge of the leaf as well, so that the weight is well balanced (fig. 15-D)
- 3) It is now possible to hang the leaf to the sliding carriage following the instructions on **chapter 7.**

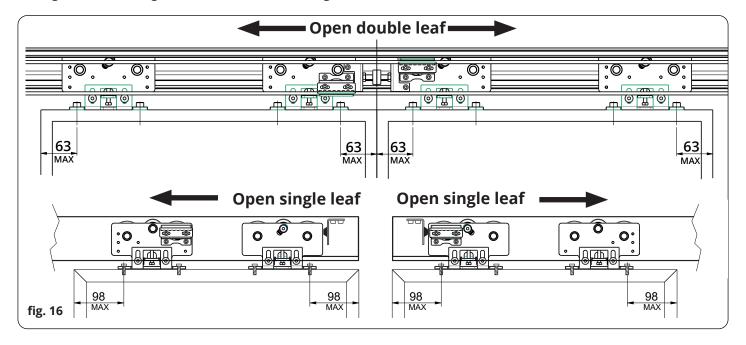
N.B.: In case of installation of the framed door support kit and in combination with S-10T-LINEBLOCL, the prescribed distance from the wall is of max 41 mm (fig. 15E), otherwise, without the electric lock, it can be adjusted up to a max of 51 mm (see the measurements indicated between the brackets in fig.15E)

Assembling of the support kit for framed leaves (10T-LINEANT) fig 15.

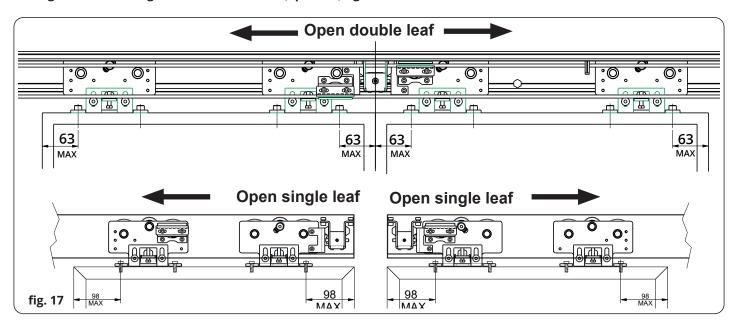




Arrangement of carriages without electric block (fig. 16).



Arrangement of carriages with electric block (optional) fig. 17.



WARNING: If you have purchased the (optional) electric lock, go to chapter 12 "FIXING AND ADJUSTING THE ELECTRIC LOCK AND EMERGENCY MANUAL RELEASE".

9. PLACING BRAKE BUFFERS ON DOUBLE LEAF

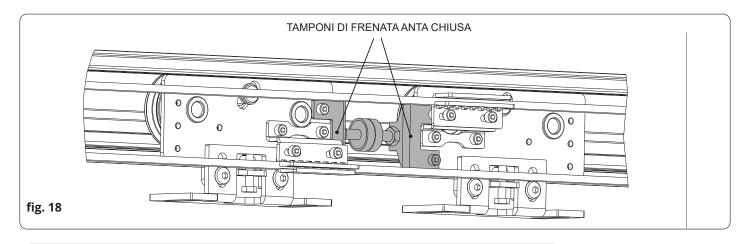
The brake bumpers must be adjusted in such a way that, both during the closing and opening manoeuvres, they will stop the carriages before the moving leaf hits the wall, frame or any other obstacle. They are also used by the microprocessor to acquire the limit switch positions if there is a power failure and the battery is not connected.



While adjusting the opening braking stopper, please remember that, during normal operation, the moving leaf stops 5 mm before hitting the stopper (with the exception of the first operation after a power cut).

9.1 Positioning of brake pads without electric lock

- 1) Fix on mobile carriages the appropriate door stop buffers of closing, as in figure 18
- 2) Position the leaves in closed position.
- 3) Adjust the distance of the stop buffers with the screw and lock with the lock nut.
- 4) Take the leaves to the fully open position.
- 5) Adjust the brake pad in the opening with the carriage door and secure it with screws.



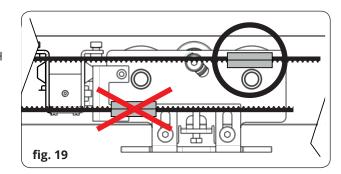
10. COUPLING THE CARRIAGE WITH THE TRANSMISSION BELT WITH SINGLE LEAF

In the single leaf automatic door, the **LH carriage** clamp must be fixed in the top part of the transmission belt on the right of the carriage, as shown in figure 19.

This operation must be carried out in any case with both LH and RH opening, both with and without (optional) electric lock.



IMPORTANT: configure the control unit selecting the correct sense of LEAF DIRECTION (see the D-MNL0DC19 manual, dipswitch 4).



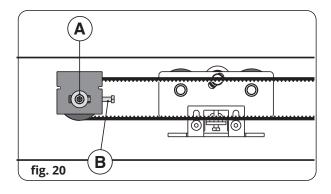
11. ADJUSTMENT BELT TENSION AND EASY OPENING OF CARTER FOR MAINTENANCE

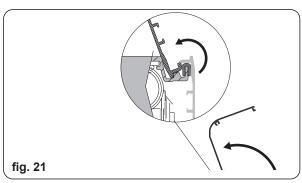
To adjust the tension of the belt (fig. 20), loosen screw **A** in the idle pulley lightly, then screw (to tighten) or unscrew (to loosen) hex screw **B**.

Once the desired tightness has been obtained, tighten screw A firmly.

Easy opening for maintenance.

Open the cover and place it in the slot as in fig. 21.





12. FIXING AND ADJUSTING ELECTRIC LOCK AND EMERGENCY MANUAL RELEASE (S-10T-LINEBLOCF2 / S-10T-LINEBLOCL)

You can operate the manual release in two modes: pressing the release lever in the center position (optional) or by pulling the appropriate release cable (optional).



Important: the electric block with lever release can be used on automatic doors with framed leaves with a maximum thickness of 50mm.

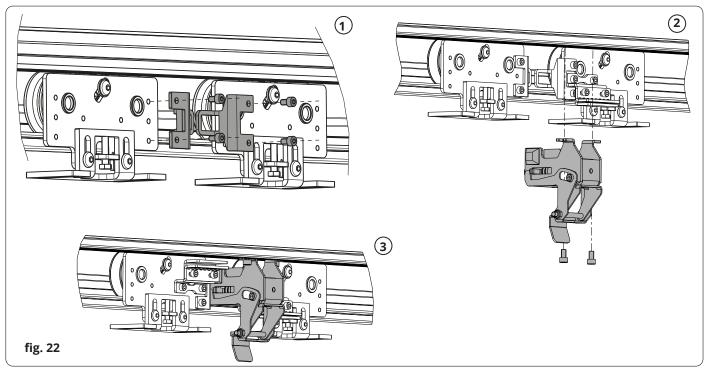


Warning: do the following without a mains voltage, and with the battery disconnected!

12.1_ Installing electric lock with emergency manual release lever (fig. 22):

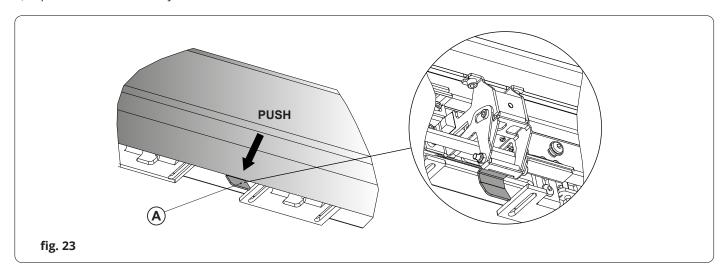
- 1) secure with screws the two brackets of the electric lock, one on the right carrier and one on the left carrier, as in fig. 22-1;
- 2) passing the nuts into the rail on the beam and screw, without tightening, the electric lock with lever on the track of the beam to the center position of the door (fig. 22-2);
- 3) install the doors door and accompany them manually to the closed position and thoroughly fix the electric lock.

N.B. for the electric lock installed by T-LINE leverage a single leaf has the same effect by mounting a retaining bracket on the carriage movable wing (pic. 22-1).

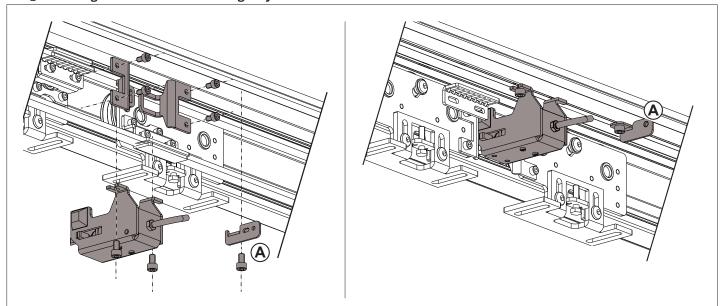


- Should it be necessary to manually open the sliding door, proceed as follows:

 1) remove the tension and release the leaves by pressing the lever (A) at the center of the beam (Fig. 23);
- 2) open the doors manually.

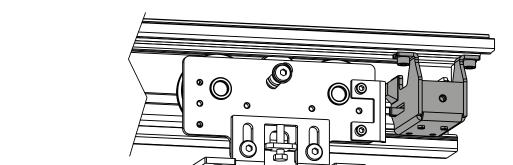


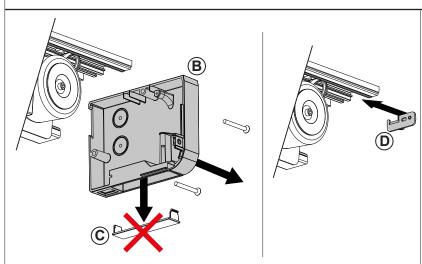
12.2_ Installing electric lock with emergency manual release with side handle



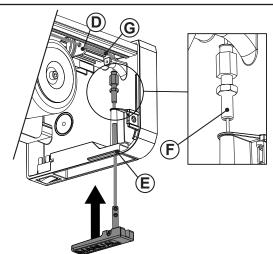
- 1) Put the two stop brackets of the electric lock as in picture 22.1.
- 2) Slide on the beam the three nuts and fix the electric lock in the middle position of the door. Place the spring's stop bracket **A** on the beam, 10cm to the right of the electro-locking device

 If the door is one single leaf, predispose the electric lock in the closed door position, as shown below.





- 3) Remove the right side stopper **B** and detach and remove the release handle's cover **C**.
- 4) Install the **D** wire bracket on the appropriate beam track.



- 5) Reposition the right side stopper B and fix it through screws.
- Pass the release cable through the hole E, the cable tensioner F and the bracket D.

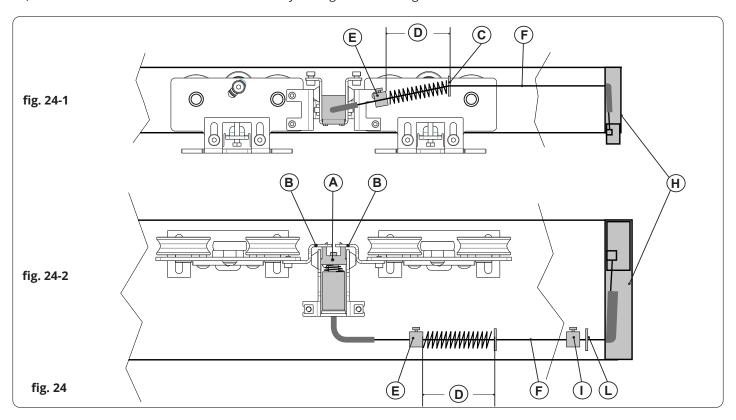
12.3 Cable installation for wire release:

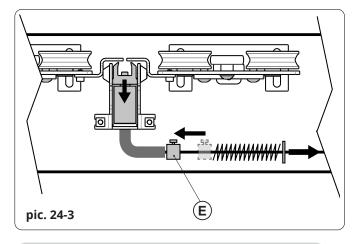
1) Put the door leaves in closed position and verify that the locking brackets **B** are both in contact with the rubber pads of the electric lock **A** (fig. 24).

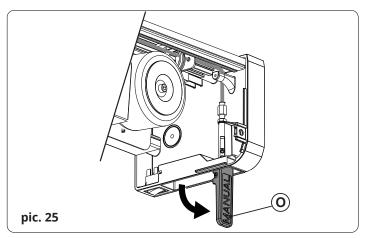
N.B.: if one or both of the brackets are not in contact with the stop buffers, despite the closed leaves, adjust accordingly the position of the carriages.

- 2) Check that the release cable has a free space **D** between the clamp and the cable grommet bracket of at least **50 mm**.
- 3) Loosen the terminal **E** so that it can slide on the release cable and lead, if necessary, the mobile part **A** of the electric lock in the closed position (fig. 24-2).

- 4) Pull the F cable up to bring the electric lock on "doors unlocked" position and secure it with the clamp E (see Fig. 24-3).
- 5) Move handle O to the released leaf position (fig. 25)
- 6) Pass the wire coming from the electric lock **A** and the wire coming from the handle **O** through the same terminal **I**, tighten both cables so that the electric lock is unlocked, and tighten the clamp **I**.
- 7) Move the handle **O** on "locked leafs" position and loosen the terminal **E**.
- 8) Pull and release the release cable by verifying that the mobile part **A** allows to move the leaves freely.
- 9) Keep the wire taut and ensure the moving leaves remain in the locked leaf position, preload the spring and tighten terminal **E** with a distance from wire bracket **C** of at least 50mm.
- 10) Ensure that terminal and cable can move freely through the various guides.

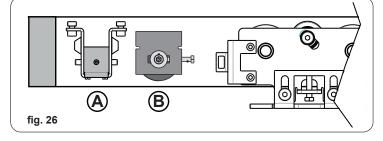






13. SETTING OF THE COMPONENTS AND INSTALLATION OF THE SINGLE LEAF, RIGHT OPENING SLIDING DOOR

Please follow the instructions below in order to install the electro-locking device and the belt tightener in a single leaf, right opening sliding door.



13.1_Setting of the electro-locking device and of the belt tightener

The electro-locking device **A** must be placed on the left of the automatic door as shown in figure 26. The belt tightener **B** must then be placed to the right of the electro-locking device **A**.

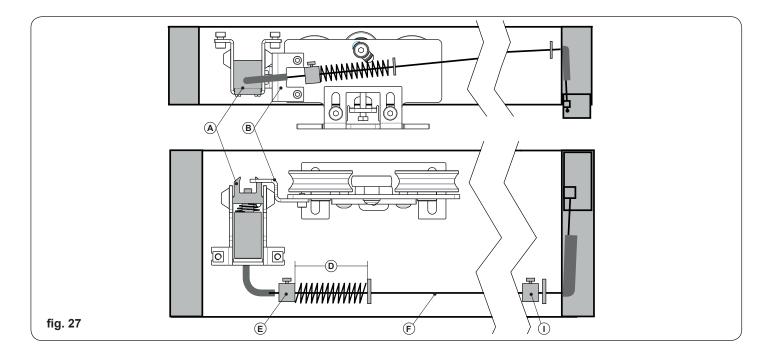
13.2_Installation of the cable for the electro-locking device:

1) Place the leaves of the door in the closing position and make sure that the locking bracket **B** touches the rubber buffets of the electrolocking device **A** (figure 27).

of the tracks accordingly.

- 2) Make sure that there is a free space **D** of about 50 mm in the unlocking cable between the terminal and the bracket.
- 3) Loosen the terminal **E** so that it can slide on the unlocking cable. If necessary, place the mobile part of the electro-locking device **A** in the closing position (fig. 24-3) Make then sure that the electro-locking device keeps the leaf closed b moving it manually.
- 4) Pull the cable **F** until the electro-locking device is in the "unlocked leaf" position and lock it through the terminal **E**.
- 5) Place the handle **O** in the "open-unlocked leaves" position (fig. 25).
- 6) Stretch the metal wire and lock it through the provided terminal.
- 7) Pull and release the unlocking cable making sure that its mobile part **A** locks and unlocks the leaves still moving freely.
- 8) Keep the wire tight and make sure that the mobile leaves remain in the "locked" position. Load the spring and tighten the terminal **E**.
- 9) Make sure that the terminal and the cable can easily slide through the different guides.

NB: If the sliding door opens towards left, follow the above mentioned instructions, but place the electro-locking device on the right side of the automatic door, 90 cm before the end of the aluminium beam (lenght of the beam).



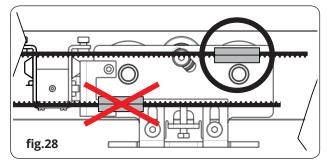
14. COUPLING THE CARRIAGE WITH THE TRANSMISSION BELT WITH SINGLE LEAF

In the single leaf automatic door, the LH carriage clamp must be fixed in the top part of the transmission belt on the right of the carriage, as shown in figure 28.

This operation must be carried out in any case with both LH and RH opening, both with and without (optional) electric lock.



IMPORTANT: configure the control unit selecting the correct sense of LEAF DIRECTION (see the D-MNL0DC19 manual, dipswitch 4).

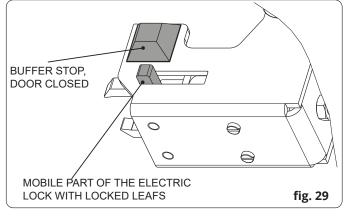


15. POSITIONING THE BRAKE BUMPER (fig. 4 and 5 - n°12)

The brake bumpers must be adjusted in such a way that, both during the closing and opening manoeuvres, they will stop the carriages before the moving leaf hits the wall, frame or any other obstacle. They are also used by the microprocessor to acquire the limit switch positions if there is a power failure and the battery is not connected.



While adjusting the opening braking stopper, please remember that, during normal operation, the moving leaf stops 5 mm before hitting the stopper (with the exception of the first operation after a power cut).



15.1 Positioning of brake pads with electric lock

- 1) Carrying both leaves in closed position.
- 2) Check that both carriages touch the brake pads on electric lock simultaneously. If not, adjust the carriages position on the doors.
- 3) Take the leaves to the fully open position.
- 4) Adjust braking pads (n ° 12 fig. 4 and 5), must be in contact with the door carriages and locked with screws.

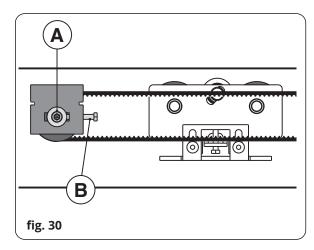
16. ADJUSTMENT BELT TENSION AND EASY OPENING OF CARTER

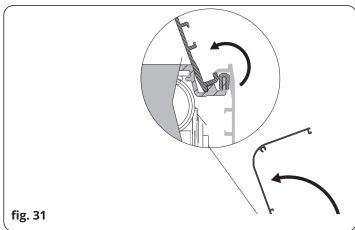
To adjust the tension of the belt (fig. 30), loosen screw A in the idle pulley lightly, then screw (to tighten) or unscrew (to loosen) hex screw B.

Once the desired tightness has been obtained, tighten screw A firmly.

Easy opening for maintenance.

Open the cover and place it in the slot as in fig. 31.





GUARANTEE: GENERAL CONDITIONS

TAU guarantees this product for a period of 24 months from the date of purchase (as proved by the sales document, receipt or invoice).

This guarantee covers the repair or replacement at TAU's expense (ex-works TAU: packing and transport at the customer's expense) of parts that TAU recognises as being faulty as regards workmanship or materials.

For visits to the customer's facilities, also during the guarantee period, a "Call-out fee" will be charged for travelling expenses and labour costs.

The guarantee does not cover the following cases:

- If the fault was caused by an installation that was not performed according to the instructions provided by the company inside the product pack.
- If original TAU spare parts were not used to install the product.
- If the damage was caused by an Act of God, tampering, overvoltage, incorrect power supply, improper repairs, incorrect installation, or other reasons that do not depend on TAU.
- If a specialised maintenance man does not carry out routine maintenance operations according to the instructions provided by the company inside the product pack.
- Wear of components.

The repair or replacement of pieces under guarantee does not extend the guarantee period. In case of industrial, professional or similar use, this warranty is valid for 12 months.

MANUFACTURER'S DECLARATION OF INCORPORATION (in accordance with European Directive 2006/42/EC App. II.B)

TAU S.r.I.

Address:	Via E. Fermi, 43 - 36066 Sandrigo (Vi) ITALY
Declares under its sole responsibility, that the product: designed for automatic movement of: for use in a: complete with:	Electromechanical actuator Pedestrian Sliding Doors Residential / Communities environment Electronic control unit (and any electromechanical release/ locking device S-10DOORBLOC)
Model: Type: Serial number: Commercial name:	T-LINE T-LINE SEE SILVER LABEL AUTOMATIC SLIDING DOOR
Has been produced for incorporation on an access point (pedes an access point, to constitute a machine in accordance with the	trian sliding door) of for assembly with other devices used to move such a Machinery Directive 2006/42/EC.
Also declares that this product complies with the essential safe - LVD 2014/35UE Low Voltage Directive - EMC 2014/30UE Electromagnetic Compatibility Directive	
The following standards and technical specifications are applied EN 13849-1 EN 13849-2 (operator in category 2, PL = d) EN 61000-6-2	d:

Also declares that *it is not permitted to start up the machine* until the machine in which it is incorporated or of which it will be a component has been identified with the relative declaration of conformity with the provisions of Directive 2006/42/EC.

The manufacturer undertakes to provide, on sufficiently motivated request by national authorities, all information pertinent to the quasi-machinery.

Sandrigo, 15/05/2017

EN 61000-6-3 EN 60335-1 EN16005

Manufacturer:

The Legal Representative

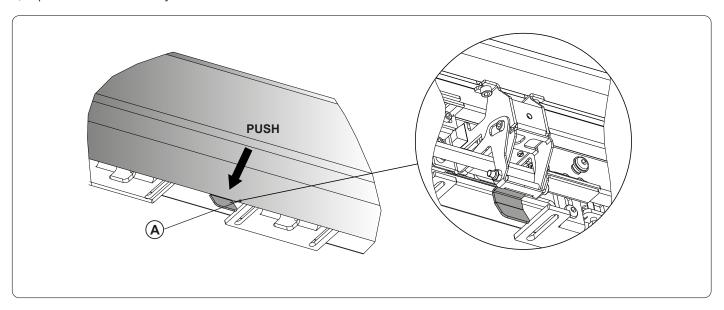
Loris Virgilio Danieli

Name and address of person authorised to draw up all pertinent technical documentation: Loris Virgilio Danieli - via E. Fermi, 43 - 36066 Sandrigo (Vi) Italy

MANUAL RELEASE

Should it be necessary to manually open the sliding door, proceed as follows:

- 1) remove the tension and release the leaves by pressing the lever (A) at the center of the beam;
- 2) open the doors manually.





Via Enrico Fermi, 43 - 36066 Sandrigo (VI) - Italy Tel +39 0444 750190 - Fax +39 0444 750376 info@tauitalia.com - www.tauitalia.com





Foglietto illustrativo

CARTA - Raccolta differenziata. Segui le indicazioni del tuo comune. (N.B.: togliere i punti metallici)



Instruction leaflet

PAPER - Waste separation. Follow the instructions of your city hall. (Note: remove the staples)