

INSTALLATION MANUAL

ETERNA 90 EASY



Automation for automatic sliding doors





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GENERAL SAFETY WARNINGS

Carefully read this instruction manual for the safe installation and operation of the automatic door.

Improper installation and incorrect use of the product could cause serious injury.

Keep the instruction manual for future reference.

The installer must provide all the information about operation and provide the system user with the user manual delivered with the product.

MEANING OF THE SYMBOLS USED IN THESE INSTRUCTIONS



DANGER:

Indication of dangerous situations that could cause material damage and personal injury.



WARNING:

Identifies the procedures that absolutely must be understood and followed in order to avoid damage to the product or malfunctions.



NOTE:

Highlights important information.

GENERAL SAFETY OBLIGATIONS



The mechanical and electric installation must be performed by specialised personnel in accordance with the applicable directives and regulations.

The installer must make sure that the structure to be automated is stable and robust and if necessary, make structural modifications to make it so.

Keep product and packaging materials out of children's reach, as they might be a source of danger.

Do not let the children stay or play within the operating range of the door.

This product is designed and built exclusively for the purpose described in this documentation. Any other use that is not specifically indicated could adversely impact the condition of the product and the safety of people.

Label accepts no responsibility for incorrect product installation and usage, as well as for any damage caused by changes made without its prior consent.

Label is not responsible for the construction of the doors to be motorised.

The IP22 protection class requires that the automation is installed only on the inner side of buildings.

This product cannot be installed in explosive environments or atmospheres, or in the presence of flammable gases or fumes.

Make sure that the characteristics of the electric distribution network are compatible with the technical data indicated in this manual and that upstream of the system there is an omnipolar switch with an opening distance of the contacts of at least 3mm and a residual current device.

Connect the ground wire of the electric system.

The automatic door must be checked, started up, and tested by skilled and well-prepared personnel.

A technical dossier must be compiled for every automation, as established in the Machinery Directive.

Disconnect the power supply before working on the automation and before opening the cover.

Maintenance is of fundamental importance for the proper operation and safety of the automation. Check the efficiency of all parts every six months.

Use only original spare parts for maintenance and when replacing product components.

Cleaning operations must be performed with the power supply disconnected, using a damp cloth. Do not deposit or let water or other liquids penetrate into the automation or the accessories that are part of the system.



It is recommended to subscribe a maintenance contract.



The automatic sliding doors must be designed and installed so as to protect users against the risk and danger of crushing, impact, shearing and conveying between the leaf and adjacent parts near the door outline.

The person responsible for starting-up the automation must perform a risk assessment based on the place of installation and the type of users that could use the automatic door.

Safety during the opening cycle is ensured by the application of one of the following methods:

- Safety distances between the secondary closing edge and the adjacent environment parts.
- Force limitation on the leaf.
- Use of protection devices (sensors) complying with the standard EN12978.
- Installation of protections like fixed panels or barriers, preventing people from reaching the dangerous points.
- Low Energy motion.

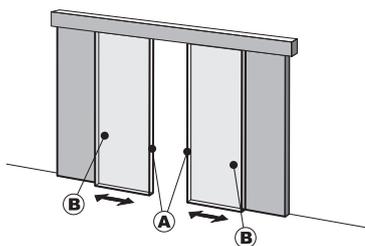
Safety during the closing cycle is ensured by the application of one of the following methods:

- Use of protection devices (sensors) complying with the standard EN12978.
- LOW ENERGY motion.

It is essential to be aware that when most users are old/ill/disabled people and children, any contact of the door with the user is not acceptable.

Any residual risks must be properly highlighted.

SLIDING DOOR HAZARDOUS AREA



(A) Main closing edge

(B) Secondary closing edge

1 - DESCRIPTION OF THE MODELS

The ETERNA 90 EASY automation has been designed and manufactured for the control of pedestrian automatic sliding doors. A list of the ETERNA 90 EASY sliding door automation models produced by Label is provided below:

- **ETERNA 90 EASY D**
Automation for double door leaf, max. weight 90Kg./leaf.
- **ETERNA 90 EASY S**
Automation for single door leaf, max. weight 130Kg.

The choice of the model depends on the type of door to be automated (single- or double-leaf sliding door).

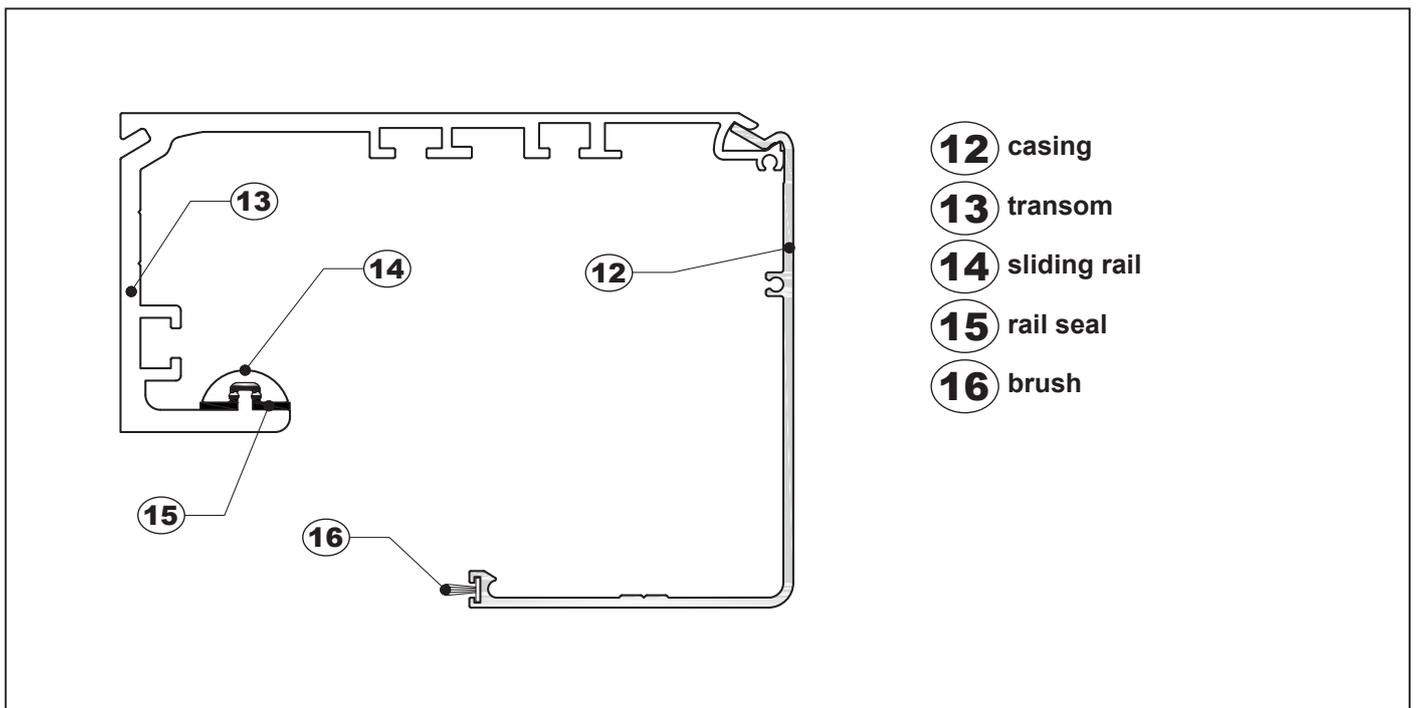
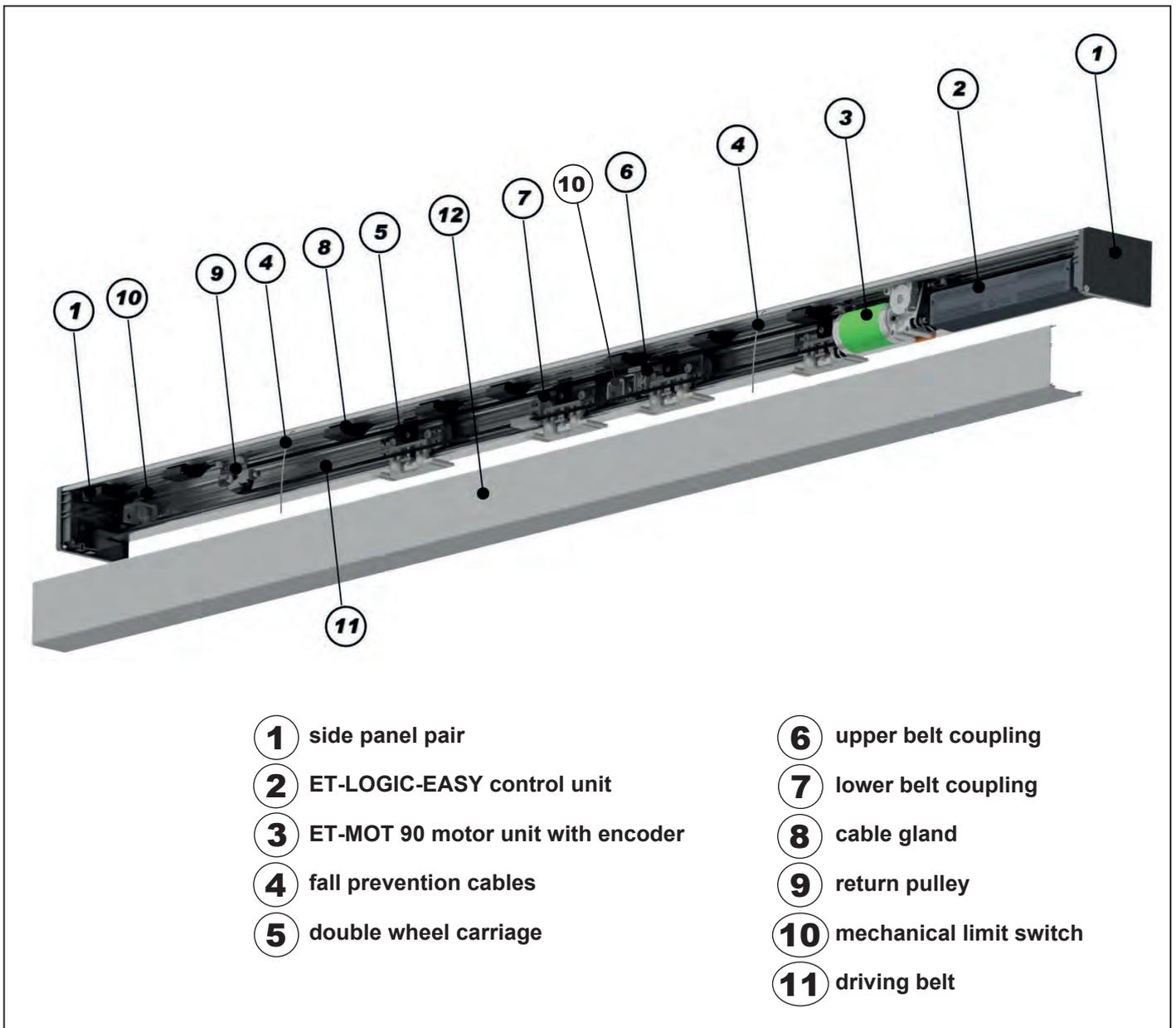
All ETERNA 90 EASY automation models can be equipped with the battery for emergency opening and with the electric lock.

The automation must be installed in indoor environments.

ETERNA 90 EASY

2 - TECHNICAL SPECIFICATIONS OF THE ETERNA 90 EASY AUTOMATION

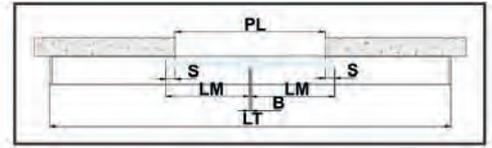
MODELLO	ETERNA 90 EASY D 2 leaves	ETERNA 90 EASY S 1 leaf
Power supply	230V~	
Max. power	100 W	
Stand-by consumption	6W	
Maximum weight of leaves	Max. 90 Kg/leaf	Max. 130 Kg/leaf
Brushless Motor	24Vdc with built-in encoder	
Opening speed	Max. 90 cm/s (per leaf)	
Closing speed	Max. 60 cm/s (per leaf)	
Pause time	0 to 30 seconds	
Operating temperature	-15° C ÷ +50°C	
Protection class	IP22	
Sound pressure emission	LpA ≤ 70dB (A)	
Power supply for external accessories	24 Vdc	
Transom dimensions (H x P)	100 x 135 mm	
Transom length	max 6500 mm	
Frequency of use	continuous	



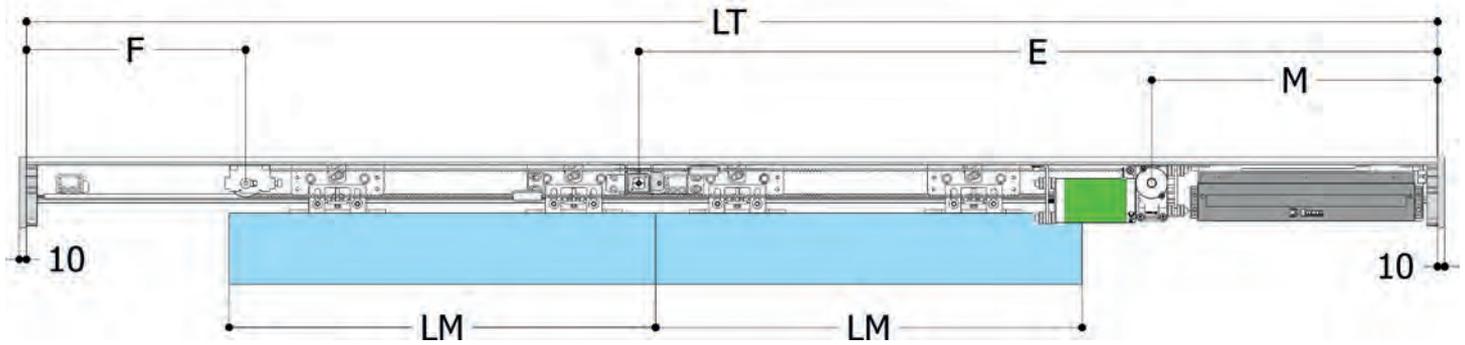
4) TECHNICAL DRAWINGS

LEGEND:

LT = TRANSOM LENGTH (WITHOUT SIDE COVERS)
 PL = FREE PASSAGE
 LM = LEAF WIDTH
 B = LIMIT DEVICE
 S = OVERLAP LEAF

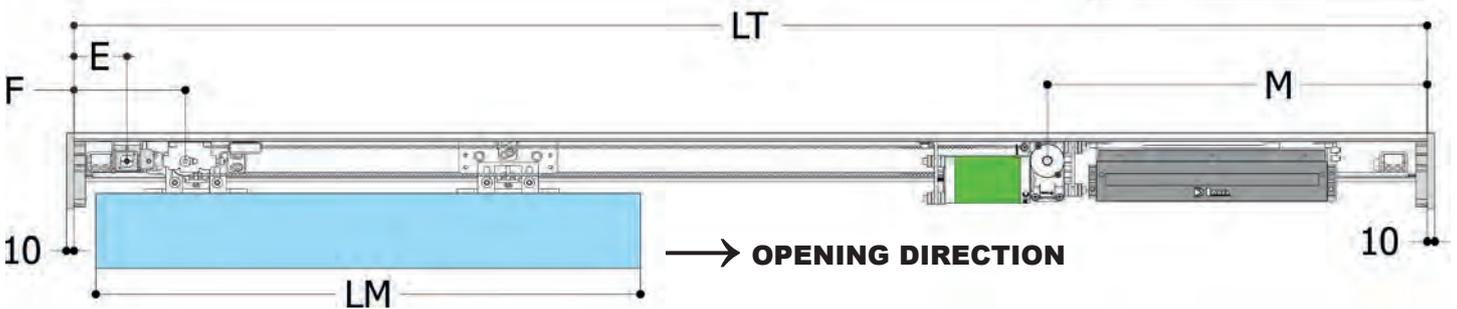
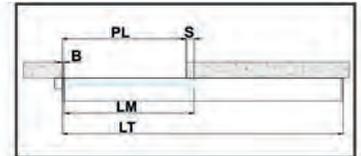


DOUBLE LEAF



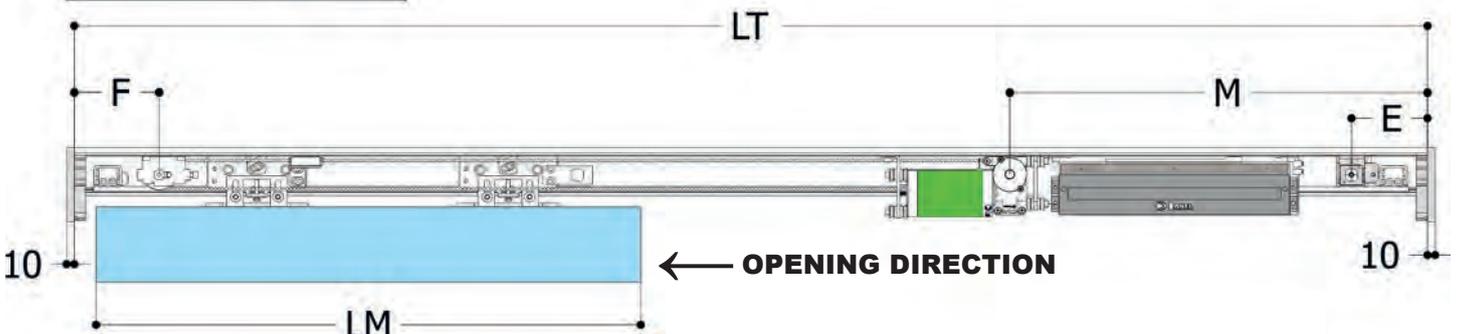
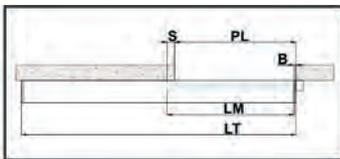
LT = TRANSOM LENGTH $LT=2PL+2S+50$	PL = FREE PASSAGE $PL=(LT-50)/2-S$	LM = LEAF WIDTH $LM=(LT-(50+B))/4+S/2$	F = IDLE PULLEY $F=LT/4-270$	*M = MOTOR PULLEY $M=LT/4 -150$	LC = BELT LENGTH $LC=(LT-(F+M))*2+200$	E = ELECTRIC LOCK $E=LT/2+30$
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RIGHT OPENING SINGLE LEAF



LT= TRANSOM LENGTH $LT=2PL+S+25$	PL= FREE PASSAGE $PL=(LT-25)/2-S/2$	LM= LEAF WIDTH $LM=(LT-(25+B))/2+S/2$	F= IDLE PULLEY $F=180$	*M = MOTOR PULLEY $M=LT/2-300$	LC= BELT LENGTH $LC=(LT-(F+M))*2+200$	E= ELECTRIC LOCK $E=90$
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LEFT OPENING SINGLE LEAF



LT = TRANSOM LENGTH $LT=2PL+S+25$	PL = FREE PASSAGE $PL=(LT-25)/2-S/2$	LM = LEAF WIDTH $LM=(LT-(25+B))/2+S/2$	F = IDLE PULLEY $F=180$	M = MOTOR PULLEY $M=LT/2 -300$	LC = BELT LENGTH $LC=(LT-(F+M))*2+200$	E = ELECTRIC LOCK $E=90$
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*for M < 420mm see paragraph 4.1

4.1) TECHNICAL DRAWINGS - SPECIAL APPLICATIONS

In case the distance M (Motor Pulley) is less than 420mm, it is necessary to use the code ET-KM420 that enables to assemble the motor separately with respect to the control unit.

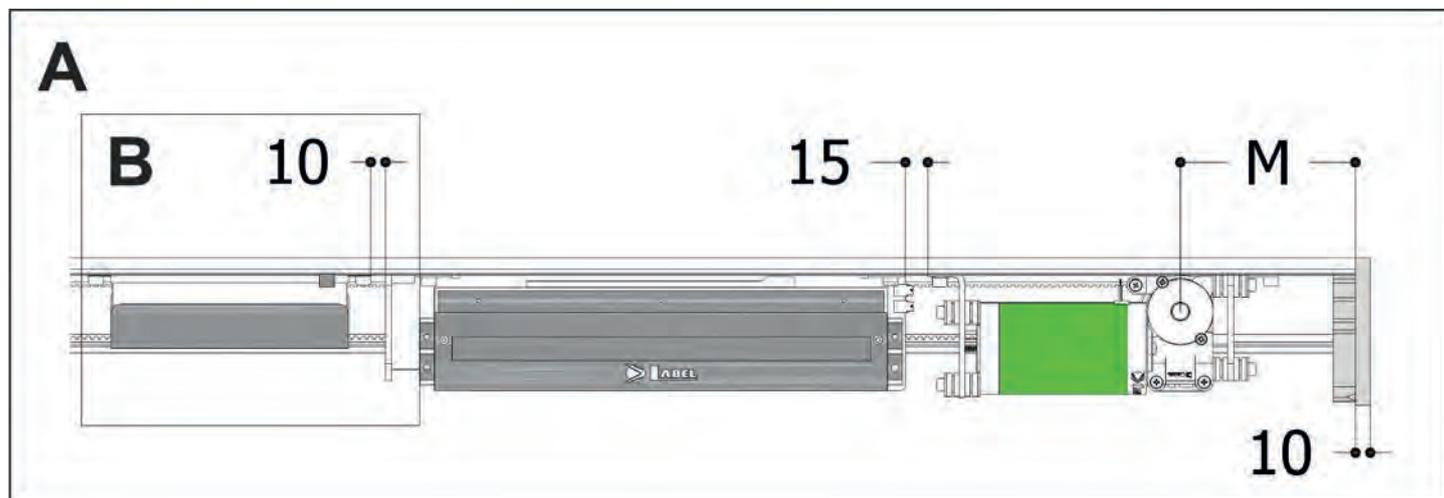
Installation examples:

If presence sensor **3H-IR14C** (V00247 - Label Price List Code) must be mounted flush with its mounting bracket **V00246** - Label Price List Code.

In the case of dual leaf automation whose length is less than **LT<2300 mm**.

In the case it is necessary to move the motor to install specific accessories located inside the transom.

For these cases, assemble the driving unit as in image **A**.



If the battery **ET-BAT90** is present, it is necessary to use the code ET-KBAT420 to position the battery laterally with respect to the control unit, see detail **B**.

5 - COVERING CASING

The casing of the ETERNA 90 EASY automation is provided with two fall prevention cables (A) designed to ensure its stability in the opening position (Fig.1).

Insert the two fall prevention cables in the seats located on the transom and on the casing with the ends facing the same direction. (FIG.2).

Position the casing on the automation, hooking the top part with the transom FIG.3 and close it pushing downwards.

Fasten the casing by means of the screws on the side panels FIG.4.

In order to remove the casing from the automation, remove the fastening screws, press the bottom of the casing toward the automation and at the same time push downwards the inner part of the casing rotating it in the direction of the arrow (FIG.5).

Once removed from the transom, the casing will be suspended by means of the fall prevention cables.

In order to remove fully the casing from the automation, extract the end of each fall prevention cable from its seat in the casing.

Manually support the casing before extracting the cables.

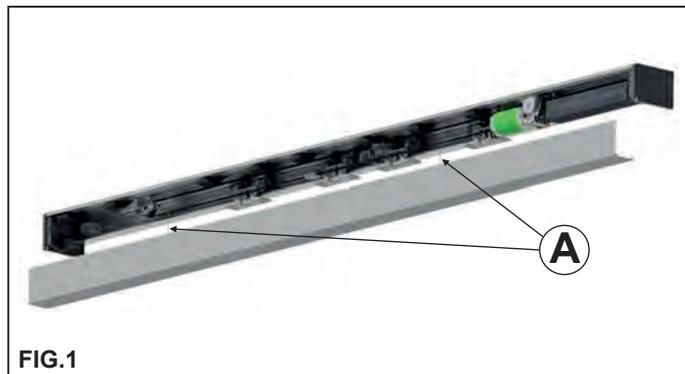


FIG.1

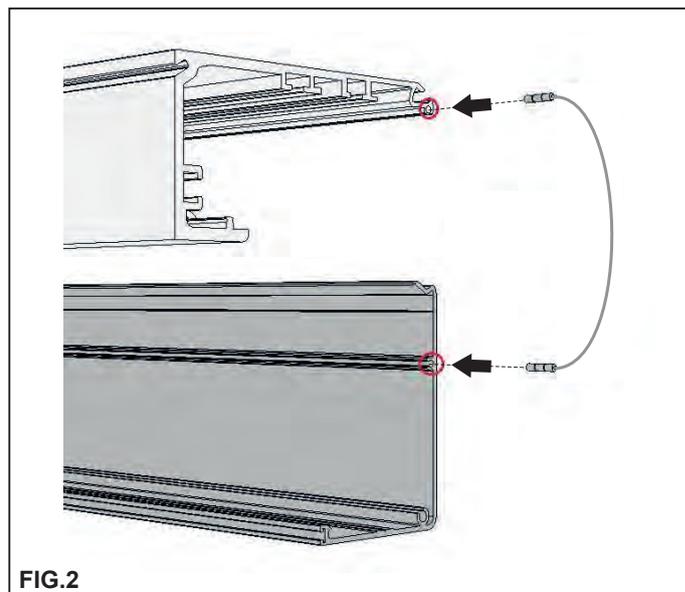


FIG.2

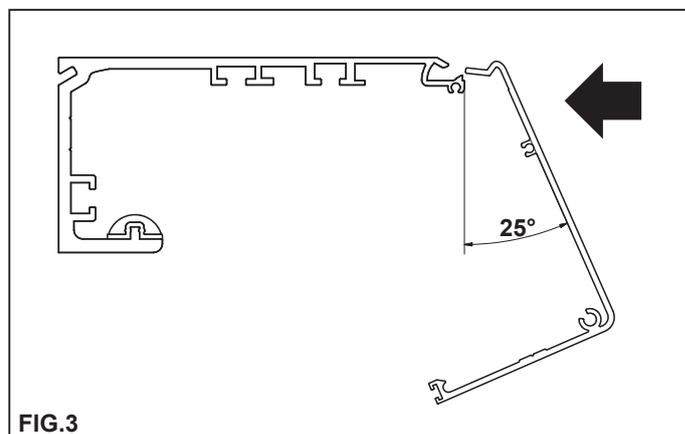


FIG.3

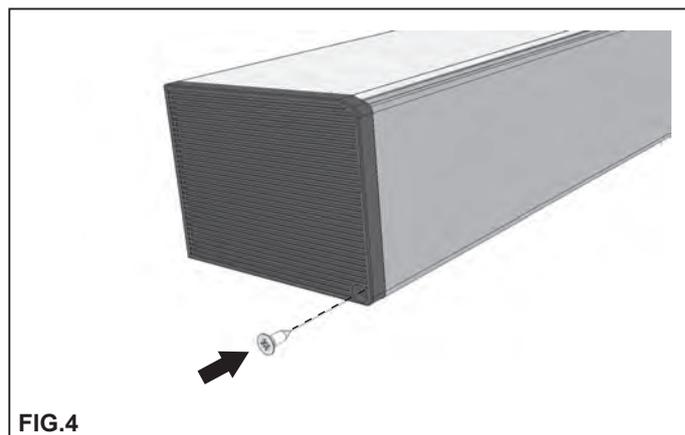


FIG.4

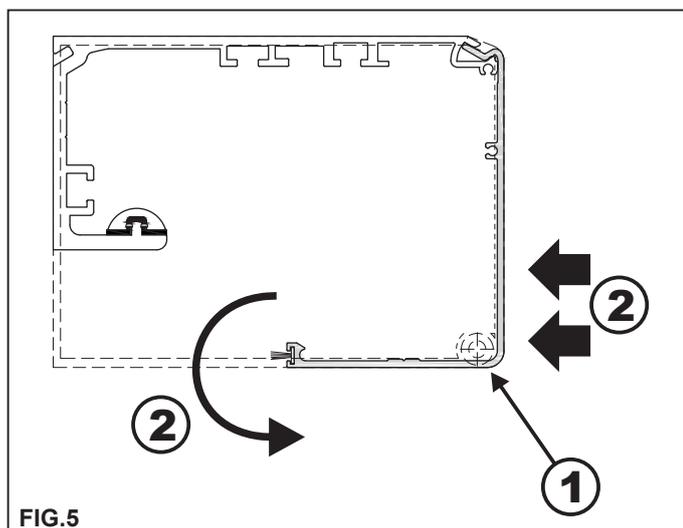


FIG.5

6 - BELT TIGHTENING ADJUSTMENT

To adjust belt tightening, slightly loosen the A screw of the idle pulley, then screw in (to increase belt tightening) or unscrew (to decrease belt tightening) the hexagonal screw B.

After achieving the optimum driving belt tightening fully tighten screw A.

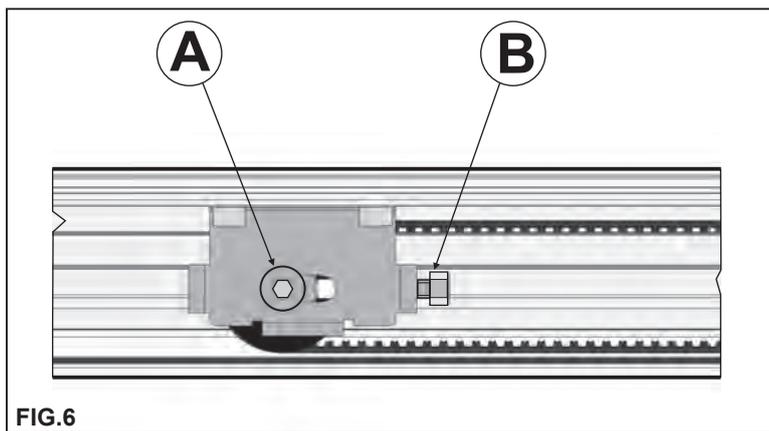


FIG.6

7 - POSITIONING THE MECHANICAL LIMIT SWITCH

The mechanical limit switch must be adjusted so that both during opening and closing it stops the carriage run before the mobile leaf hits any other component.

It is also used by the electronic control unit to get the leaf limit points.

When adjusting the opening mechanical limit switch, take into account that except for the set-up manoeuvre and for the first manoeuvre after a power failure, at the end of the opening the mobile leaf stops about 5 mm before coming into contact with the limit switch.

To adjust the limit switch, loosen the 2 fastening screws, move the limit switch to the desired position, then fully tighten the 2 screws again.

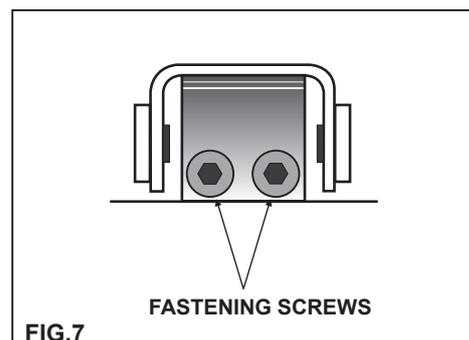


FIG.7

8 - ANCHORING THE LEAVES TO THE CARRIAGES AND ADJUSTING THEM

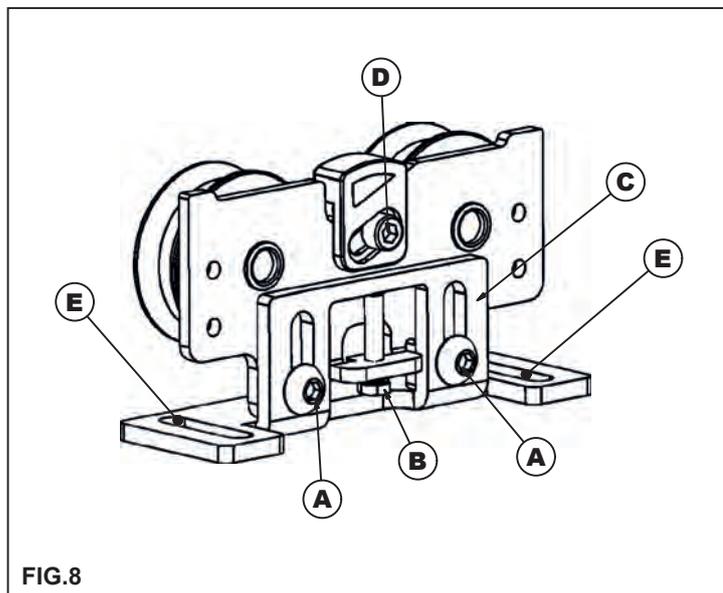
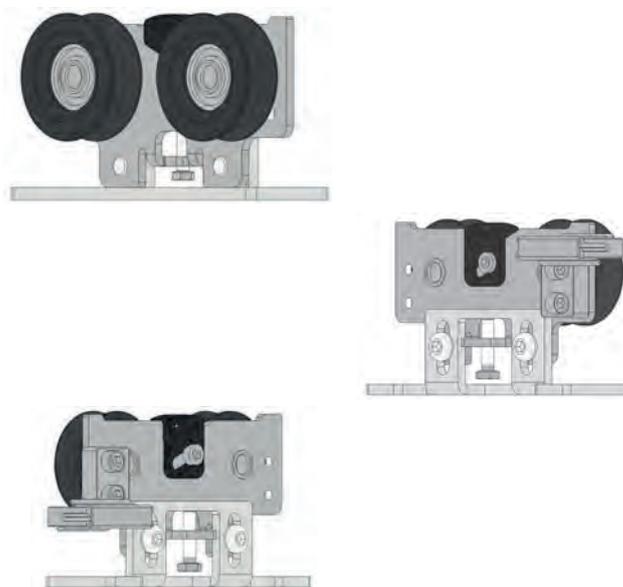


FIG.8



! Unscrew the two front screws "A" of every carriage and remove the movable part "C"

! Secure the disassembled mobile part "C" on the door at the distance shown in the figures from 9 to 12 depending on the type of automation.

! Now hang the leaf to the automation, matching the two carriage parts, then screw the "A" screws into their seats without tightening them.

! Adjust the height of the leaf by means of the control screw "B" and fully tighten the two "A" screws.

! Adjust the leaf horizontally by means of the eyelets "E" provided in the movable part of the carriage.

! To ensure the correct operation of the automated equipment, it is important that the mobile leaf is perpendicular to the transom.

! Adjust the height of the retaining runner operating the adjustment screw (D) so that the runner touches the top inner profile of the transom without applying pressure.

! Then manually move the leaf and check that there are no frictions at any point, otherwise adjust again the retaining runner.

DOUBLE LEAF WITHOUT ELECTRIC LOCK

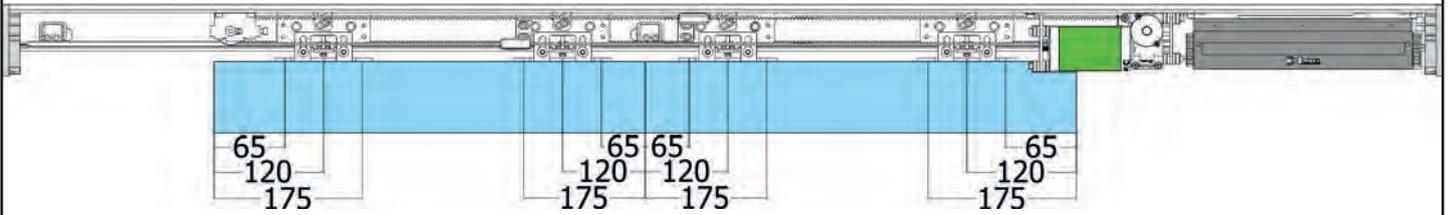


FIG. 9

DOUBLE LEAF WITH ELECTRIC LOCK

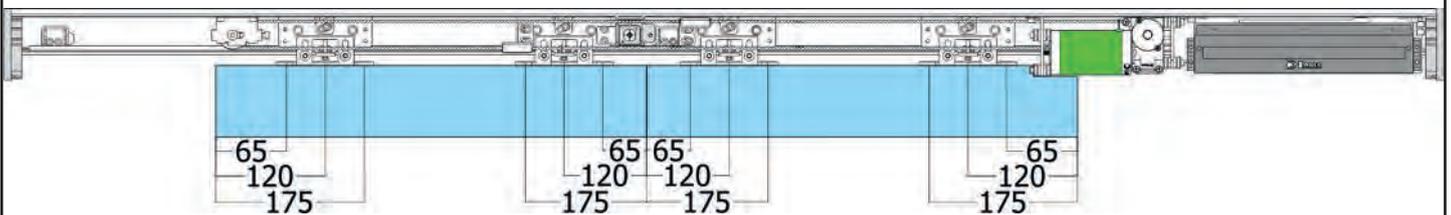


FIG. 10

LEFT CLOSING SINGLE LEAF WITH ELECTRIC LOCK



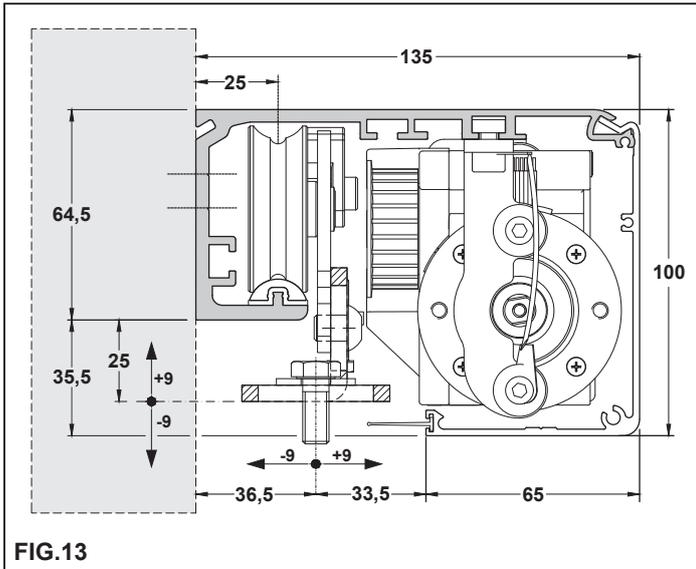
FIG. 11

RIGHT CLOSING SINGLE LEAF WITH ELECTRIC LOCK



FIG. 12

9 - INSTALLATION MEASURES



The transom must be fastened to a flat surface solid enough to bear the weight of the leaves to be used.

If the wall or the support do not meet these characteristics you will have to provide a suitable tubular element, as the transom is not self-bearing.

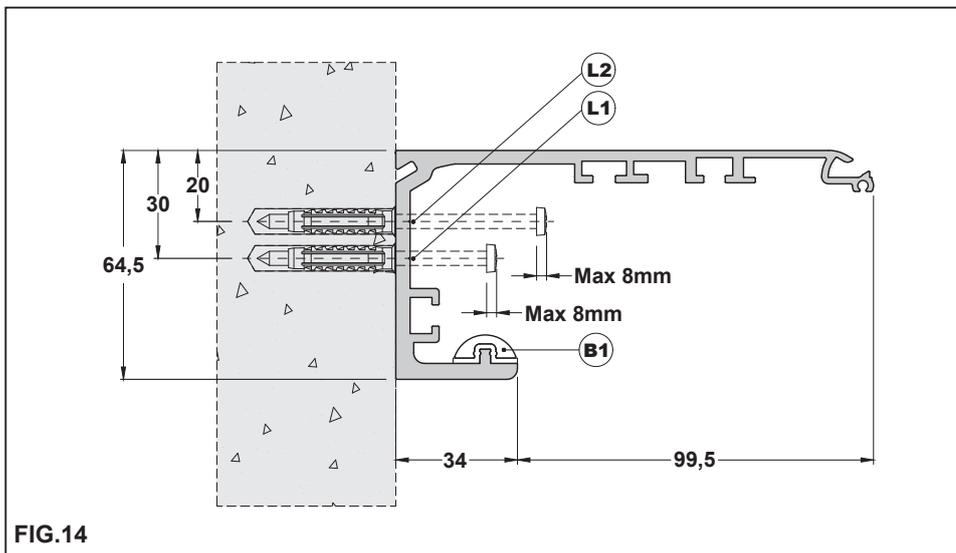
Fasten the transom by means of M6 or equivalent fixings.

The fastening points must be distributed alternately between the reference lines on the transom (L1 and L2) every 300mm.

The figure shows the fastening dimensions.

When drilling the transom and the wall, take care not to damage the sliding rail (B1) as that would affect the operation and the quietness of the automated equipment.

After fastening the transom, thoroughly clean the sliding area from any drilling scraps.

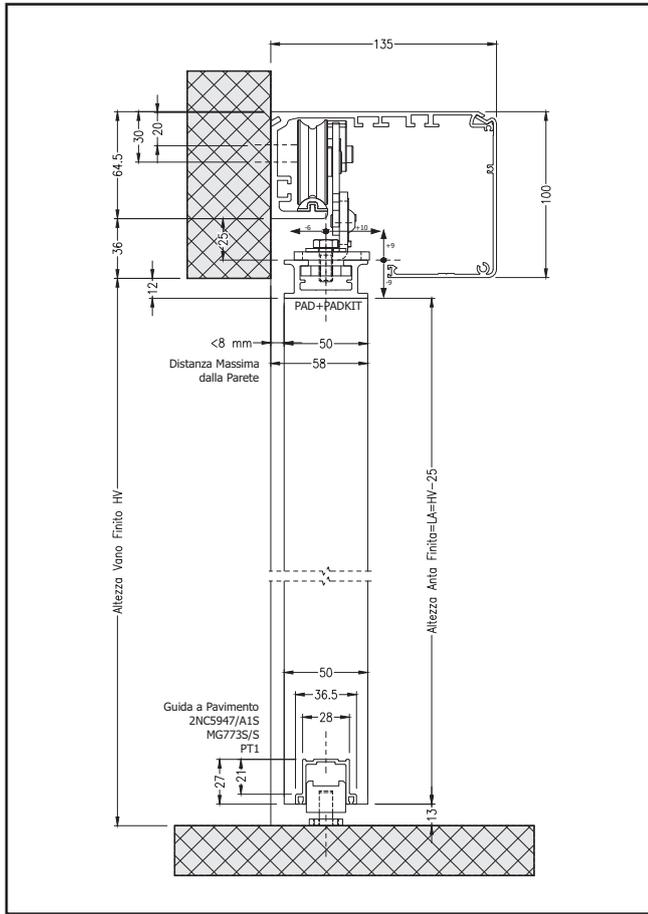


REQUIRED TOOLS

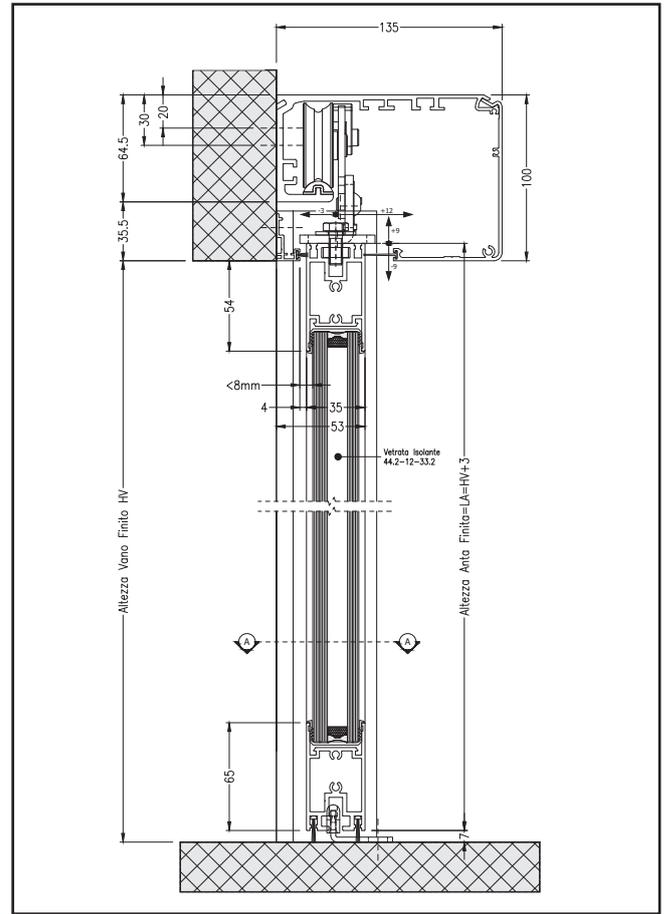
Tape measure, drill, level, thin flat-head screwdriver, medium-sized flat-head screwdriver, cross-head screwdriver, Allen wrenches with handle (sizes 3 - 4 - 5 - 6), flat-head wrench 10.



SECTION WITH COMMERCIAL PROFILES



SECTION WITH LB35 PROFILE SYSTEM



DIMENSIONAL TABLE

LEGEND:

- LT = AUTOMATION LENGTH
- PL = FREE PASSAGE
- LM = LEAF WIDTH
- B = FINAL LEDGES
- S = LEAF OVERLAPPING

1 MOBILE LEAF			2 MOBILE LEAVES		
Sizing mm			Sizing mm		
LT= automation length LT=2PL+S+25	LM= leaf S= overlap B= contact with S=50 B=10 LM = (LT-(25+B))/2+S/2	PL = free passage PL = (LT-25)/2-S/2	LT= automation length LT=2PL+2S+50	LM= leaf S= overlap B= contact with S = 50 B = 10 LM = (LT-(50+B))/4+S/2	PL = free passage PL = (LT-50)/2-S
2000	996	976	2300	572,5	1102
2500	1246	1226	2500	622,5	1202
3000	1496	1476	3000	747,5	1452
3500	1746	1726	3500	872,5	1702
4000	1996	1976	4000	997,5	1952
4500	2246	2226	4500	1122,5	2202
5000	2496	2476	5000	1247,5	2452
5500	2746	2726	5500	1372,5	2702
6000	2996	2976	6000	1497,5	2952

10 - ELECTRIC LOCKS

10.1) GENERAL DESCRIPTION

The electric lock for the ETERNA 90 EASY automation is available in 3 models, which have different behaviour during a power failure.



a) FAIL SAFE «ET-FSA»

In the case of a power failure, of both mains power supply and emergency battery power, the electric lock will release the leaves, which can then be moved manually.



b) FAIL SECURE «ET-FSE»

In the case of a power failure, of both mains power supply and emergency battery power, the electric lock will keep the leaves locked.



Electric locks are supplied in Kit, including coupling brackets and fastening accessories.

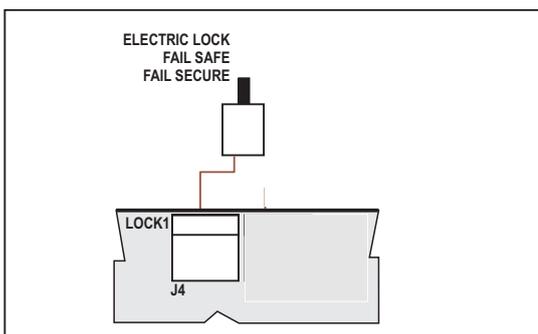
10.2) POSITIONING and ELECTRIC CONNECTION



The dimensions for fastening the electric lock to the automation are specified in Paragraph "TECHNICAL DRAWINGS".

The electric lock is fastened to the automation by 2 M6 X 10 screws on M6 nuts in the special lower slot in the transom.

The sliding carriages must be regulated so that when the leaf is in closed position, the electric lock piston can hook the carriage bracket and keep the leaves locked.



The electric lock kit includes a power supply cable. This cable has two wires on one end that are connected to the electric lock solenoid wires with the specific terminals. The other end of the cable has a connection that is inserted in the LOCK1 connector on the ETERNA 90 EASY automation electronic control unit.

10.3) MANUAL RELEASE



The models Fail Secure ET-FSE and Bistable ET-BIS are equipped with the ET-SMA manual release system that is used to release the electric lock in the case of a power failure, and therefore move the leaves freely.

RELEASE HANDLE FASTENING

A



For fastening on both the right and left side of the automation, you need to fasten the adjustment register on the bottom of the release handle.

B



Insert the steel cable inside the flexible sheath as shown in the figure.

C



Secure the bottom of the release handle to the side panel, using the self-tapping screws provided.

Respect the positions indicated in the opposite figure.

D



Apply the adhesive label as shown in the figure, taking the four black bands on the label as a reference, which must be positioned in correspondence of the 4 cardinal points.

Insert the steel cable end into the release handle as shown in the figure and fasten the handle to the bottom with the special screw.

E



Apply the screw cover label on the fastening screw.

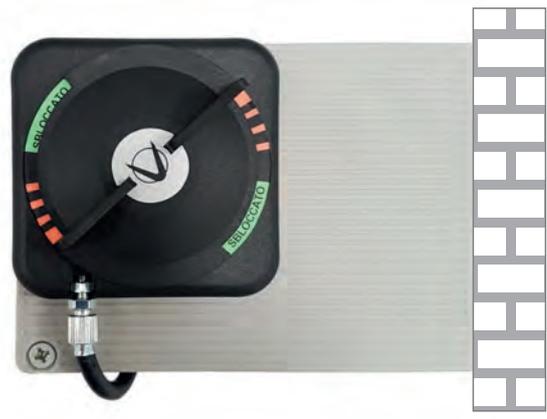
By moving the release handle to the UNRELEASED position, only the orange part of the label with the drawn arrows must be visible.

F

Insert the flexible sheath inside the side panel.



LEFT SIDE PANEL



RIGHT SIDE PANEL

G



Insert the sheath using the cable guides until reaching the electric lock.
Cut off the excess sheath.

H



Insert the steel cable into the release handle and into the sheath until reaching the electric lock.

I



Fit the sheath end on the tip of the sheath which has been cut.

L



Position the compression spring and insert the metal cable inside the special release anchor, then lock it with the screw clamp.
Adjust cable tightening so as to give the spring a light pre-load.

M



Check manual release operation, when the handle is in locked position, the electric lock must operate normally.

N



When the handle is in released position, the electric lock must remain open and release the leaves.

O



Cut the excess steel cable from the release anchor.

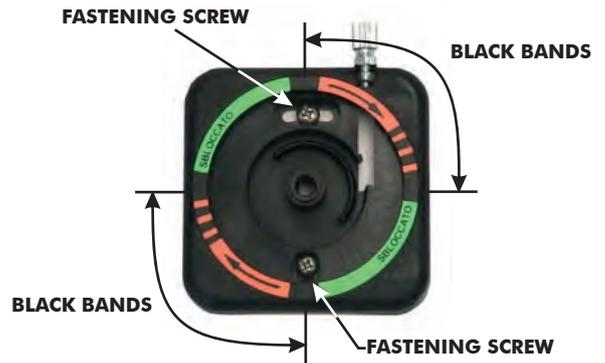
NOTE:

In case of FAIL SECURE electric lock, by releasing the release, the electric lock will close.

10.4) INSTALLATION OF THE MANUAL RELEASE ON THE WALL

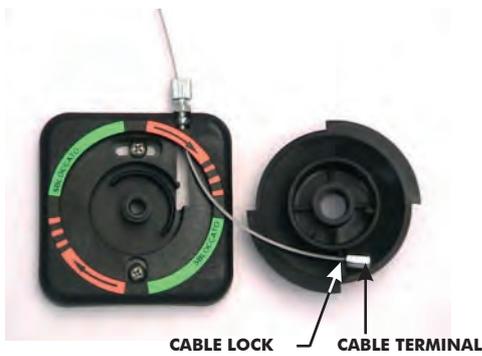


Identify the fastening point on the wall, taking into account that the standard cable sheath is 3 metre long and that it must reach the electric lock.

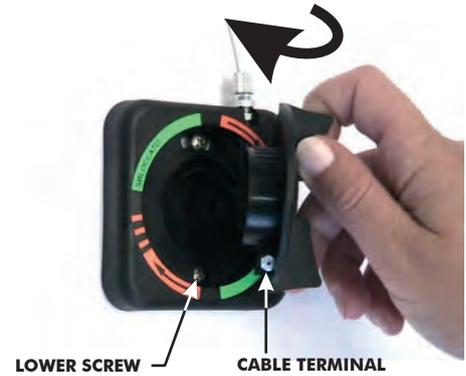


Drill the wall and fasten the base of the release mechanism using the fastening screws.

Apply the adhesive label as shown in the figure, taking the four black bands on the label as a reference, which must be positioned in correspondence of the 4 cardinal points. Insert the adjustment register using 2 nuts, one in the plastic slot and the other outside of it.



Pass the release cable in the slit in the base and then inside the adjustment register as shown in the figure. Then position the cable terminal on the release handle cable lock (see figure).



Now, insert the release handle on the base of the mechanism, being careful to keep the cable terminal in the seat of the cable lock and the handle in the correct position. When inserting the handle, the cable terminal must be in the position just beyond the lower fastening screw, in a clockwise direction.



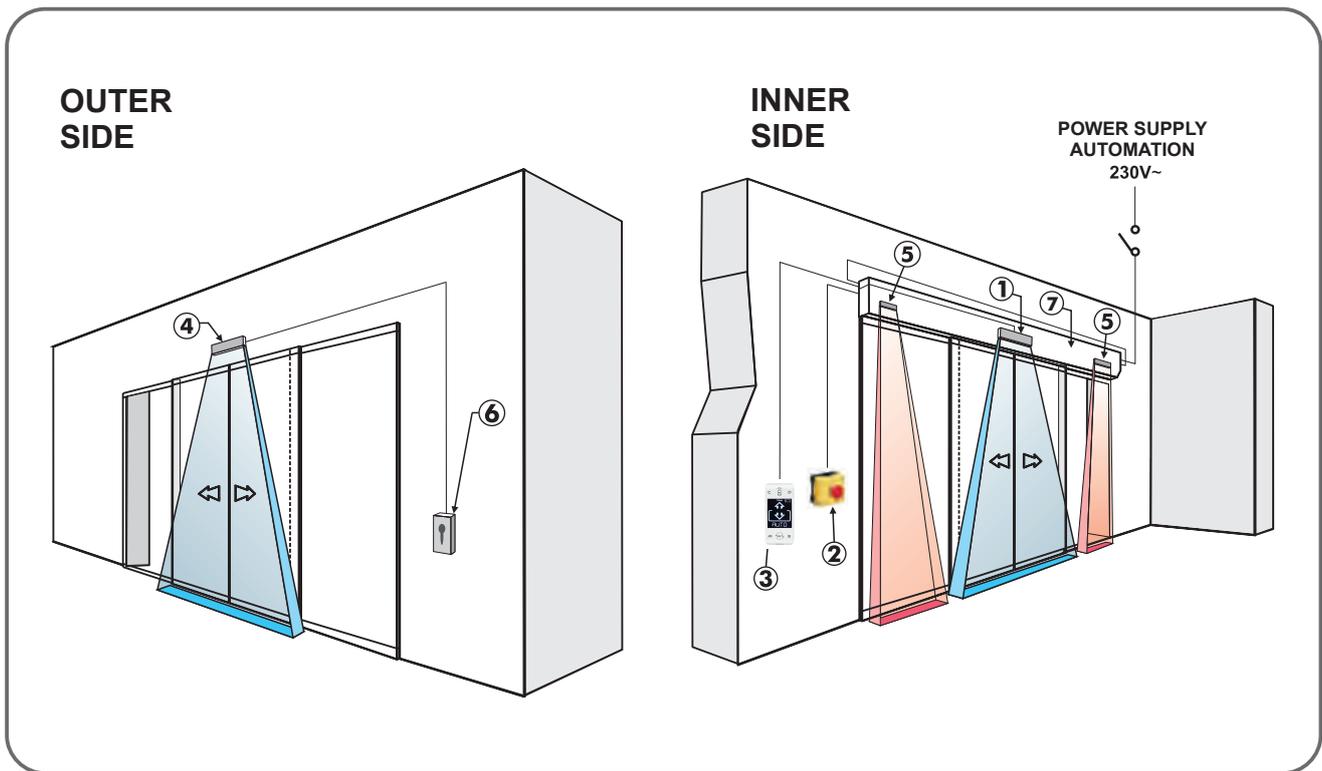
Once the handle is inserted, fasten the closing screw, insert the sheath and turn the handle to the UNRELEASED position. In this position, only the orange part of the label with the black arrows must be visible.

Make sure that the system is operating by turning the handle clockwise and keeping the cable taut with your hand.

WARNING:
THE HANDLE TURNS BY MAX 45-50 DEGREES AND AT THE END, THERE ARE STEPS IN ORDER TO MAINTAIN THE POSITION AFTER THE LOCK.

Apply the provided screw cover label as shown in the figure and return the handle to the UNRELEASED position.

11) ELECTRIC CONNECTIONS



DESCRIPTION OF ACCESSORIES

CORRESPONDING CABLE

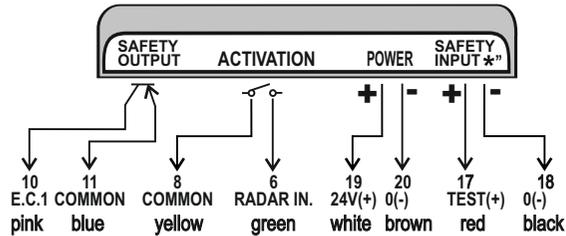
① Internal movement and presence sensor for door opening and safety during closing	N° 1 CABLE 8 x 0,5 mm
② Emergency opening button	N° 1 CABLE 2 x 0,5 mm
③ Selector programmer T-EASY	N° 1 CABLE 4 x 0,25 mm
④ External movement and presence sensor for door opening and safety during closing	N° 1 CABLE 8 x 0,5 mm
⑤ Opening safety sensor	N° 1 CABLE 6 x 0,5 mm
⑥ Key button	N° 1 CABLE 2 x 0,5 mm
⑦ ETERNA 90 EASY automation	N° 1 CABLE 3 x 1,5 (F-N-T)

ELECTRICAL CONNECTIONS ETERNA EASY 90

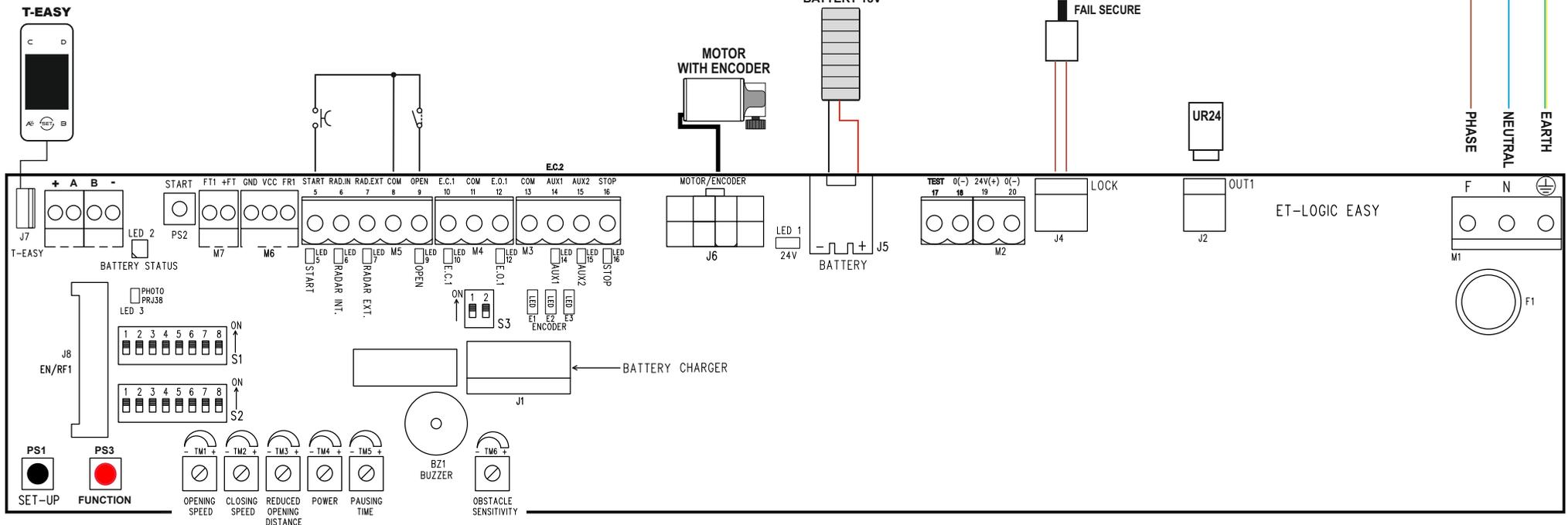
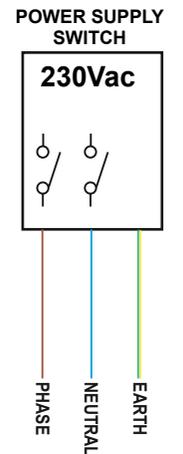
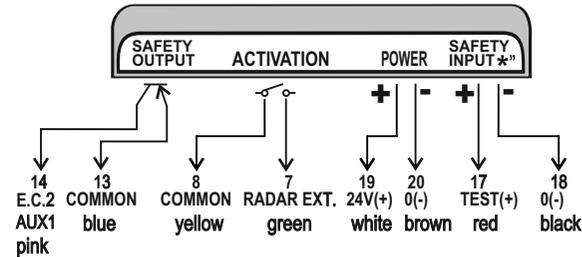
Application with two OA-FLEX - activation and safety sensor in closing

- *' To activate the operating of the safety sensor in closing EC1 set dip-switch 1 of S3 = OFF
- *' To activate the operating of the safety sensor in closing EC2 set dip-switch 1 of S2 = ON
- To activate the closing safety sensor test set dip-switch 3 of S2 = ON (as request by EN16005 European standard)
- *" Set safety input "LOW" (dip 12 = ON) on OA-FLEX T sensor

OA-FLEX T INTERNAL RADAR ACTIVATION AND CLOSING SAFETY SENSOR *



OA-FLEX T EXTERNAL RADAR ACTIVATION AND CLOSING SAFETY SENSOR *

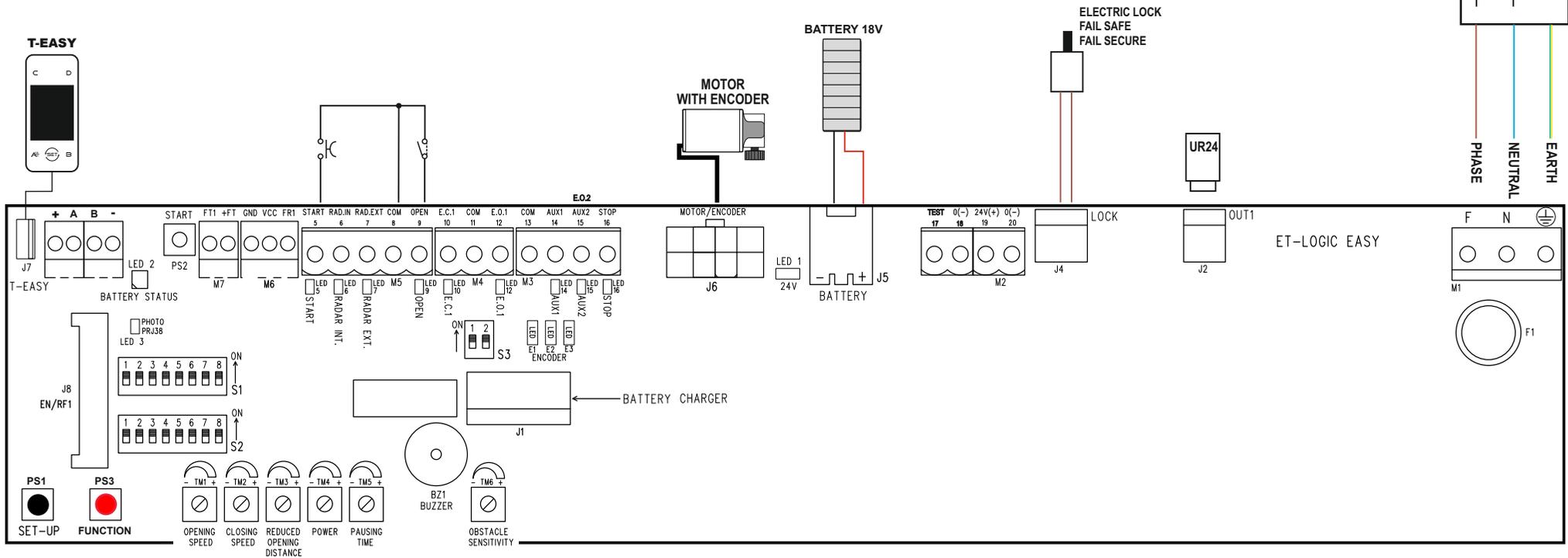
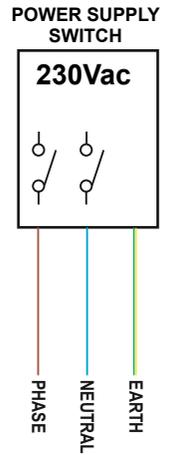
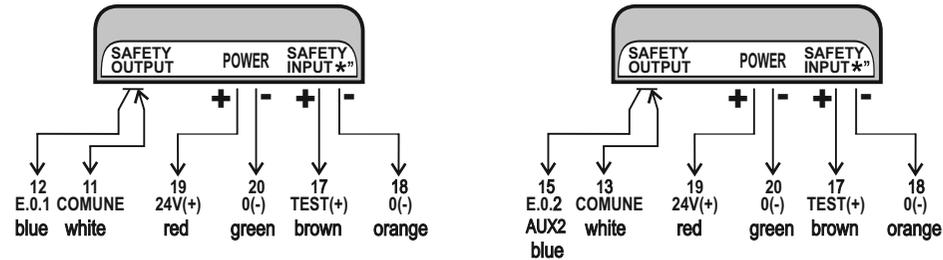


ELECTRICAL CONNECTIONS ETERNA EASY 90

- Application with two OA-PRESENCE T safety sensor in opening
- *' To activate the operating of the safety sensor in opening EO1 set dip-switch 2 of S3 = OFF.
 - *' To activate the operating of the safety sensor in opening EO2 set dip-switch 2 of S2 = ON.
To activate the opening safety sensor test set dip-switch 4 of S2 = ON (as request by EN16005 European standard)
 - *" Set safety input "LOW" (dip 10 = ON) on OA-PRESENCE T safety sensor.

OA-PRESENCE T

SAFETY SENSORS FOR OPENING *'



ELECTRIC CONNECTION DESCRIPTION



On the plastic side panels of the ETERNA 90 EASY automation (part 1 in figure in para. 3) there is a hole that must be broken open, through which the electric cables must be inserted.

Along the upper part of the aluminium transom, there are various plastic cable guides (part 8 in the figure in para. 3) inside which the cables should be run.

The installer must prepare suitable cable guides on the side panel of the automation control unit for the passage of the cables and ensure wire stability inside the automation control unit prior to the start-up of the automatic door, in order to prevent any contact between the electric cables and the moving parts of the automation.

● TERMINAL BOARD M1 (F-N-GROUND)

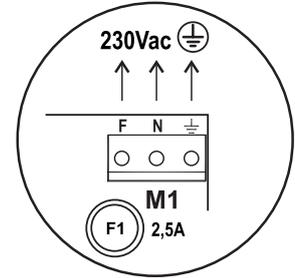
230Vac 50-60Hz mains supply;

phase at terminal F, neutral at terminal N, ground connection at terminal 

Ground the automation by connecting the ground cable from the line to one of the faston connectors to the plate of the motor and control unit module.

Then, using the specific cable, connect the second ground faston to the plate of the ground terminal onboard the electronic control unit ET-LOGIC-EASY.

The line is protected by the F1 2.5A fuse.



On the power supply mains, provide an omni-polar switch/cut off device with contact opening distance at least of 3 mm.

The power supply line must be protected against short circuit and leakage to ground.

Separate the 230Vac power supply line from the very-low voltage line control unit relative to control and safety accessories.

● TERMINAL BOARD M2 (Power supply of external accessories)

24Vdc output for power supply to accessories (radars and sensors).

Max. load 500mA.

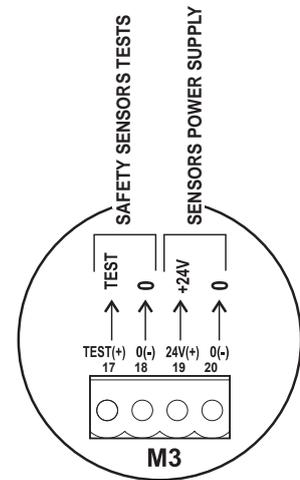
19 = Positive terminal +24V.

20 = Negative terminal 0.

The presence of the output voltage is displayed by the Led 1.

17 = Positive terminal **+** for TEST safety sensors preset with test function.

18 = Negative terminal **0** for TEST safety sensors preset with test function.



● TERMINAL BOARD M5 (Inputs 5, 6, 7, 8, 9)

8 = COMMON

5 = START input. N.O. contact.

The activation opens the door in all operating programs.

6 = INTERNAL RADAR input. N.O. contact.

Activation causes door opening. It is not active when the program selector is set to "Entry only" or to "Night lock".

7 = EXTERNAL RADAR input. N.O. contact.

Activation causes door opening. It is not active when the program selector is set to "Exit only" or to "Night lock".

18 = OPEN input. Input contact logic state can be set to either N.O. or N.C. by dip switch 5 of S2.

The activation opens the door in all operating programs.

● **TERMINAL BOARD M4 (Inputs 10, 11, 12)**

10 = Input of closing safety sensor E.C.1; N.C. contact.

The operation of the closing safety sensor EC1 must be enabled by dip-switch 1 of S3 = OFF.
If during closing it detects the presence of an obstacle, the door stops and reopens.
If during pause it detects the presence of an obstacle, the door remains open.

11 = Input Common.

12 = Input of opening safety sensor E.O.1, N.C. contact.

The operation of the opening safety sensor E.O.1 must be enabled by dip-switch 2 of S3 = OFF.
The door opens at slow speed if the sensor detects an obstacle during opening.
The door stops 200 mm from the end of the opening if the opening safety sensor is activated.

● **TERMINAL BOARD M3 (Inputs 13, 14, 15, 16)**

13 = Input Common

14 = AUX1. Input of closing safety sensor E.C.2; N.C. contact.

The operation of the closing safety sensor EC2 must be enabled by dip-switch 1 of S2 = ON.
If during closing it detects the presence of an obstacle, the door stops and reopens.
If during pause it detects the presence of an obstacle, the door remains open.

15 = AUX2. Input of opening safety sensor E.O.2, N.C. contact.

The operation of the opening safety sensor E.O.2 must be enabled by dip-switch 2 of S2 = ON.
The door opens at slow speed if the sensor detects an obstacle during opening.
The door stops 200 mm from the end of the opening if the opening safety sensor is activated.

16 = STOP input. Input contact logic state can be set by dip switch 6 of S2.

Dip switch 7 of S1=OFF: stop command to stop door motion.

Dip switch 7 of S1=ON: switch for day / night function selection.

If the input has the contact open, the door works in day mode (active radars).

If the input has the contact close the door works in night mode (disactive radars).

12) COMMISSIONING OF AUTOMATIC DOOR (INITIAL SET-UP)

After performing the mechanical installation of the automatic door and the electrical connections to the electronic control unit, make the automation set-up.

- **Preliminary checks:**

- check the cleanliness of the sliding rail and of the ground guide;
- check the belt's tension;
- check that leaves are properly aligned and fastened to the carriages;
- check that the position of the mechanical limit switch is correct;
- check that leaves move smoothly and frictionless;
- check proper operation of the electric lock, if installed, and of the relevant manual release.

SET-UP operation is necessary to allow the operator electronic control unit to acquire stroke end points.

During the stroke learning cycle there must be no obstacles in the leaf movement area.

- **SET-UP**

BEFORE STARTING THE SET-UP MOVE THE DOOR TO THE CLOSING POSITION. THE AUTOMATION WILL DETECT AUTOMATICALLY THE CORRECT DIRECTION OF OPENING DURING THE SET-UP CYCLE.

Strictly follow the next steps:

a) Set automation type by dip 1 of S1:

OFF = Eterna Easy 150

ON = Eterna Easy 90

b) Set electric lock type by dip 2 of S1:

OFF = ET-FSE (fail secure)

ON = ET-FSA (fail safe)

c) Supply power to the electronic control unit, the buzzer will emit 5 short beeps.

d) Press and hold the "PS1 SET-UP" black button  as long as the control unit buzzer emits the long beep, then release it when the control unit emits the 4 final beeps preceding motor starting.

e) The door starts closing fully, then it performs an opening cycle at slow speed, which must be necessarily completed.

At the end of the cycle a prolonged BEEP stands for the set-up completed.

After a few seconds the door closes automatically.

NOTE: In case it is necessary to interrupt the execution of the set-up cycle, press the PS2-START button.

At the end of the set-up, set the functions of the dip-switches S1, S2, S3 and potentiometers on the control unit ET-LOGIC EASY reading carefully the next paragraph "Functions and potentiometers".

13) FUNCTIONS and POTENTIOMETERS



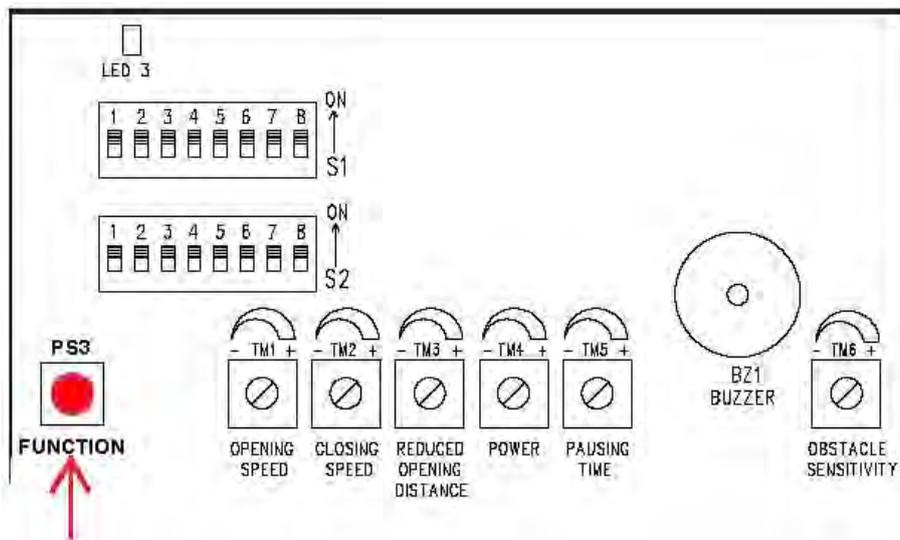
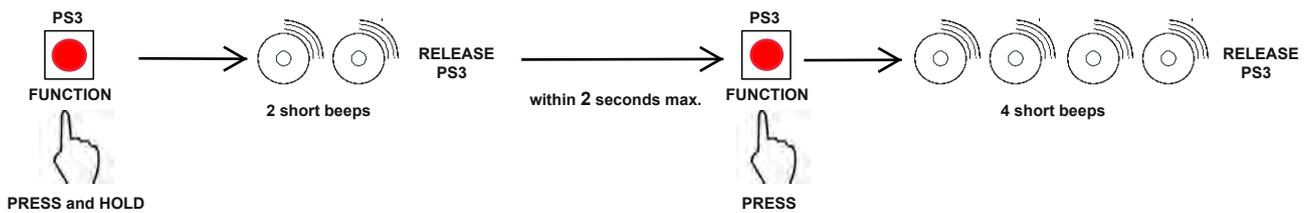
DIP-SWITCH AND POTENTIOMETERS SETTINGS

Carefully read this paragraph to learn how to adjust the dip-switch S1, S2 and potentiometers from TM1 to TM6.

After changing the dip-switch and potentiometers settings make sure to confirm through the "PS3 FUNCTION" red button in the following way:

1. Set the function on the dip switch or the value on the potentiometer (these parameters can be changed simultaneously).
2. Press and hold the "PS3 FUNCTION" red button for about 2 seconds until the buzzer emits two short beep tones and then immediately release the PS3 button.
3. Press again "within 2 seconds" the "PS3 FUNCTION" red button, the buzzer will emit four short beep tones to signal the new settings acquired.

SEQUENCE of STEPS DESCRIBED IN POINTS 2 - 3



FUNCTION TABLE DIP-SWITCH S1		
FUNCTION	STATUS	EXPLANATION
DIP 1	OFF	Automation type selection: ETERNA EASY 150 (doors up to a maximum weight of 150 kg per leaf).
	ON	Automation type selection: ETERNA EASY 90 (doors up to a maximum weight of 90 kg per leaf).
DIP 2	OFF	Electric lock type selection: ET-FSE - FAIL SECURE
	ON	Electric lock type selection: ET-FSA - FAIL SAFE
DIP 3	OFF	Standard function: the electric lock activates when the door is closed only in the Night Lock work program.
	ON	Bank function: the electric lock activates when the door is closed in all work programs
DIP 4	OFF	Operation when powered by battery: if the mains power supply is off the door keeps working normally.
	ON	Operation when powered by battery: if the mains power supply is off the door opens and stays open in the automatic work programs.
DIP 5	OFF	Battery monitoring: if the battery is low or damaged the control unit buzzer beeps before the door opens for ten cycles.
	ON	Battery monitoring: if the battery is low or damaged, the door opens and stays open in automatic programs.
DIP 6	OFF	Night lock program: OPEN and START inputs are enable to open the door.
	ON	Internal Radar enabling time when the Night Lock work program is selected. The Internal Radar input remains enabled for 25 seconds to open the door after the Night Lock work program has been set.
DIP 7	OFF	Stop input (terminal 16): it works as a stop command. Set N.O. / N.C. status by dip-switch 6 of S2.
	ON	Stop input (terminal 16): it works as switch for day / night function selection. If the input has the contact open, the door works in day mode (active radars). If the input has the contact close the door works in night mode (disactive radars).
DIP 8		Not used

FUNCTION TABLE DIP-SWITCH S2		
FUNCTION	STATUS	EXPLANATION
DIP 1	OFF	E.C.2 closing safety sensor input inactive When the safety sensor is not installed on the E.C.2 - AUX1 input (terminal 13-14).
	ON	E.C.2 closing safety sensor input active Closing safety sensor installed on E.C.2 - AUX1 input (terminal 13-14). See electrical connections "drawing 2".
DIP 2	OFF	E.O.2 opening safety sensor input inactive. When the safety sensor is not installed on the E.O.2 - AUX2 input (terminal 13-15).
	ON	E.O.2 opening safety sensor input active. Opening safety sensor installed on E.O.2 - AUX2 input (terminal 13-15). See electrical connections "drawing 3".
DIP 3 Function active if dip 1 / S2 = ON or dip 1 / S3 = OFF	OFF	Test on closing safety sensors E.C.1 and E.C.2 inactive; for sensors which are not pre-arranged for the monitoring.
	ON	Test on closing safety sensors E.C.1 and E.C.2 active; for sensors pre-arranged for automatic door monitoring by the automation (cat.2/pl.c comply EN16005 standard).
DIP 4 Function active if dip 2 / S2 = ON or dip 2 / S3 = OFF	OFF	Tests on opening safety sensors E.O.1 and E.O.2 inactive; for sensors which are not pre-arranged for the monitoring.
	ON	Test on opening safety sensors E.O.1 and E.O.2 active; for sensors pre-arranged for automatic door monitoring by the automation (cat.2/pl.c comply EN16005 standard).
DIP 5	OFF	OPEN input configuration: normally open contact. If not used or if a device with N.O. contact is installed.
	ON	OPEN input configuration: normally closed contact. If a device with N.C. contact is installed.
DIP 6	OFF	STOP input configuration: normally open contact N.O.
	ON	STOP input configuration: normally closed contact N.C.
DIP 7	OFF	PRJ38 FT1/FR1 photocell: not installed.
	ON	PRJ38 FT1/FR1 photocell: installed. It works as set by dip 8 of S2.
DIP 8 Function active if dip 7 / S2 = ON	OFF	PRJ38 FT1/FR1 photocell: it works as stop command.
	ON	PRJ38 FT1/FR1 photocell: it works as safety in closing. See electrical connections "drawing 1".

FUNCTION TABLE DIP-SWITCH S3		
FUNCTION	STATUS	EXPLANATION
DIP 1	OFF	E.C.1 closing safety sensor input active Closing safety sensor installed on E.C.1 input (terminal 10-11). See electrical connections "drawing 2".
	ON	E.C.1 closing safety sensor input inactive When the safety sensor is not installed on the E.C.1 input (terminal 10-11).
DIP 2	OFF	E.O.1 opening safety sensor input active. Opening safety sensor installed on E.O.1 input (terminal 11-12). See electrical connections "drawing 3".
	ON	E.O.1 opening safety sensor input inactive. When the safety sensor is not installed on the E.O.1 input (terminal 11-12).

POTENTIOMETERS TABLE	
POTENTIOMETER	EXPLANATION
TM1	Opening speed. Max. 0,8 m/s per leaf. Increasing the value will increase speed during the opening process.
TM2	Closing speed. Max. 0,6 m/s per leaf. Increasing the value will increase speed during the closing process.
TM3	Reduced opening distance during winter. Min. 20 cm per leaf. Adjustment of the reduced opening space in percentage of the free passage.
TM4	Motor thrust power. Adjustment of motor power during door movement. At maximum value, the maximum motor thrust is obtained. The automation has a safety system that stops and reverses movement of the door if the power limit is exceeded.
TM5	Open door pausing time. Adjustable range from 0 (closing immediately after opening) to 30 seconds.
TM6	Sensitivity to the obstacle. Adjustment of the pushing time against the obstacle before the reversal of the movement. Increasing the value increases the pushing time and decreases the sensitivity.

14) FUNCTION TESTING

Select door automatic operation by program selector.

To start an opening cycle give a pulse to PS2 button (Start) on the ET-LOGIC-EASY control unit or activate the door opening devices.

Ensure that door opening and closing cycle is properly performed and that activation commands and safety sensors work properly.

To adjust sensor detection field, refer to the instructions delivered with the sensor.

The safety sensors must ensure that the leaf doesn't impact against any automatic door users.

If the operator is equipped with emergency battery, connect the battery to connector J5-BATTERY on the control unit ET-LOGIC-EASY and make sure that the battery charger board is inserted into the J1-BATTERY CHARGER of the control unit.

Adjust the potentiometers relative to the opening and closing speeds, reduced opening distance and pause time by consulting the potentiometers table in the "Functions and potentiometers" paragraph.

Check that the electric lock and the manual release are working properly.

Safety on impact: placing an obstacle in front of the leaf while it is in motion will cause the leaf to stop and the motion direction to be reversed. When performing the next cycle the leaf shall slow down in the point where it had come into contact with the obstacle.

Adjust the obstacle sensitivity by potentiometer TM6.

During door movement, intermittent signals could be heard as emitted by the buzzer to indicate that the limit power delivered by operator has been reached, especially if leaf dimensions and weight are close to the limits allowed.

Adjust the thrust power by TM4 of the control unit.

REPEATING THE INITIAL SET-UP

Set-up operation must be repeated if one of the following conditions varies:

opening distance, opening direction, replacement of the ET-LOGIC-EASY control unit.

To repeat the initial set-up, the door must be stopped in the closed position, then repeat operations described in the paragraph "COMMISSIONING OF AUTOMATIC DOOR (INITIAL SET-UP)".

15) INPUT DIAGNOSTIC

Each input of the ETERNA-EASY electronic control unit is shown by the relative LED on the board. Below the table with the correspondence between LED and relative input.

LED 1	24V: it lights up when the control unit is powered.
LED 2	Battery status: see table LED SIGNALLING on paragraph "BATTERY-POWERED EMERGENCY OPENING DEVICE".
LED 3	PRJ38: lights up when the PRJ38 photocell is activated.
LED 5	START: it lights up during the START command or by activating the radio control combined with the EN / RF1 radio receiver.
LED 6	INTERNAL RADAR: it lights up when the internal radar is activated.
LED 7	EXTERNAL RADAR: it lights up when the external radar is activated.
LED 9	OPEN: if dip 5 of S2= OFF (open input normally open). It lights up when the OPEN opening command is activated. If dip 5 of S2= ON (open input normally close). It turns off when the OPEN opening command is activated.
LED 10	EC1: it is normally light on, it goes off when the safety sensor of closing connected on terminal 10 - EC1 is activated. If no safety sensor is connected to EC1, set the dip 1 of S3 = ON and the led 10 remains always on.
LED 12	EO1: it is normally light on, it goes off when the safety sensor of opening connected on terminal 12 - EO1 is activated. If no safety sensor is connected to EO1, set the dip 2 of S3 = ON and the led 12 remains always on.
LED 14	EC2 - AUX1: If no closing safety sensor is connected on terminal 14 (AUX1), (dip 1 of S2 = OFF) the led 14 remains off. If closing safety sensor is connected on terminal 14 (AUX1), (dip 1 of S2 = ON) the led 14 is normally light on, it goes off when the closing safety sensor is activated.
LED 15	EO2 - AUX2: If no opening safety sensor is connected on terminal 15 (AUX2), (dip 2 of S2 = OFF) the led 15 remains off. If opening safety sensor is connected on terminal 15 (AUX2), (dip 2 of S2 = ON) the led 15 is normally light on, it goes off when the opening safety sensor is activated.
LED 16	STOP: if dip 6 of S2= OFF (Stop input normally open). It lights up when the STOP command is activated. If dip 6 of S2= ON (Stop input normally closed). It turns off when the STOP command is activated.
E 1	shows the encoder channel 1 signal.
E 2	shows the encoder channel 2 signal.
E 3	shows the encoder channel 3 signal.

16) T-EASY SELECTOR PROGRAM

The T-EASY selector uses the Touch technology for the buttons and features a next-generation, high-contrast display for clearer images.

It is used to interface with the door during “standard” operation by the user.

For faster installation and to eliminate the risk of connection errors, the selector is equipped with a special cable (3,5 metres long), with a built-in connector at both ends.



INSTALLATION

First of all fasten the bottom of the plastic casing to the wall or to the metal structure on which you wish to install the selector, using the supplied screws (1). The supplied cable output shall be installed in this location, on the wall or on the metal structure (if possible centred with respect to the selector casing). Break one of the 3 cable passages on the casing bottom to ensure that the cable can reach the connector located on the board.



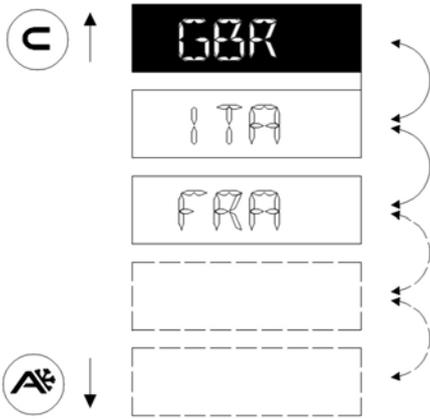
Important!

At this stage make sure that the door power supply and the battery are off.

Connect the cable to the connector located on the electronic board fastened to the plastic casing cover (2), then close the cover onto the previously installed plastic casing (3).



Insert the other terminal of the cable to J7 connector on the control unit ET-LOGIC EASY.
 After completing all the electrical connections to the electronic control unit of the automation, power the automatic door.



When installed for the first time, the selector shall automatically switch to the language selection menu.

Scroll the available languages using the A (down) or C (up) buttons until you find the desired one. Now press the SET button to confirm and exit this menu.

The language shall be saved and you shall no longer have to select it again. Should you later wish to change the language, access menu 5 from the technical area and repeat the operation.

Once the language has been chosen the selector will automatically start detecting the doors existing on the serial communication line (up to 2); the data will be stored in the processor. During this step the "WAIT" message will be displayed on the alphanumeric character line. Wait for this step to be completed before you touch any button.

Warning!



The detection operation shall be automatically performed every time the door is powered, and shall take a few seconds.

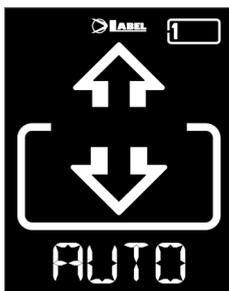
If the operation has been successfully completed the selector will display on the alphanumeric character line the saved operating program for the door, along with its text, in the desired language.

The following paragraph provides a list of the available programs (you can also customise their visibility - see the SELECTOR OPTION chapter).

Should the "NO COMM" message be displayed instead of one of the operating programs, the selector has detected no connected door. In this case check the connection and retry.

DAY-TO-DAY USE

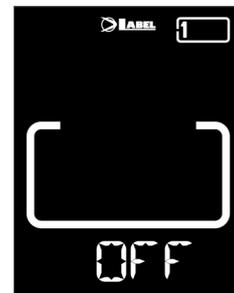
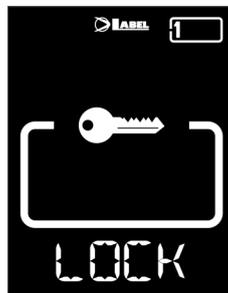
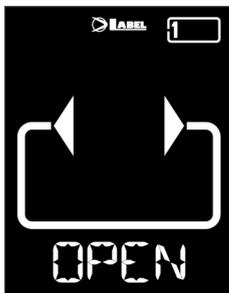
The T-EASY model allows to select 6 different program types for day-to-day use:



AUTO: The door opens and closes automatically both ways with all sensors activated

EXIT: The door only opens and closes automatically in the exit direction: the sensor connected to the External Radar input is temporarily disabled.

ENTER: The door only opens and closes automatically in the entry direction: the sensor connected to the Internal Radar input is temporarily disabled.



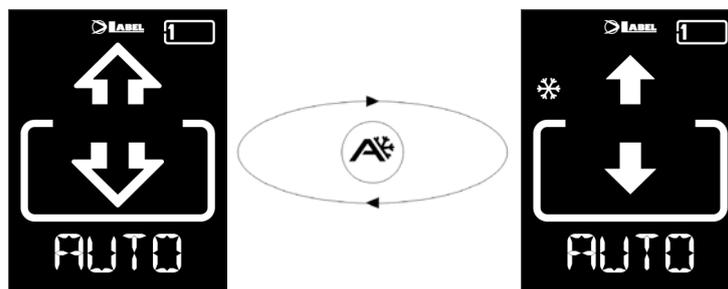
- OPEN:** The door opens and remains open until the operating program is changed.
- LOCK:** CLOSED DOOR. The door can only be opened automatically through specific inputs (Open, RX and START). Every time the door is closed, the electric lock, if any, is activated.
- OFF:** The door can be freely moved manually and does not react to the activation of any input. Use this operating program if you wish, for example, clean the glass panels and be sure that the door cannot move if you accidentally activate the opening sensors or any other activation control.

To change an operating program, press the SET button once (unless the PASSWORD LOCK or SLIDE functions are enabled; should that be the case, read the paragraph "USER PASSWORD MANAGEMENT" or "SELECTOR OPTION" before reading the remainder of this chapter) to exit the "Screen Saver " function and thus activate the selector (the screen brightness shall increase); now press SET again multiple times until selecting the desired operating program.

 **Warning!** *If no button has been pressed for about 20 seconds, the selector automatically switches to "Screen Saver" mode and decreases the display brightness.*

In addition to the operating program, at any time you can select a reduced opening function (normally used in winter in low temperatures).

To this purpose, press the A button; the corresponding symbol will appear on the display and the flow direction icons (if active) will become narrower. Press the A button again to return to the standard opening. * The figure below shows an example with the AUTO program.



OPENING THE DOOR FROM T-EASY

Pressing the B button will issue a door opening command; the closing will be automatic, as for the other sensors.

This button can open the door in every program works of the door.

USER PASSWORD MANAGEMENT

The T-EASY selector allows to password-protect the operating program change.

This function is useful if you wish to prevent unauthorised people from setting the door operating program.

To this purpose, you need to enable the user password, by following the procedure described below. Hold the D button pressed for about 2 seconds.

The “CODE>.....” message will be displayed



Type the current password (AAAAA by default), using the A-B-C-D buttons (5 digits)

You shall enter the user password area, from which you can access 3 different selection:

PASSWORD 1: To change the primary password code

PASSWORD 2: To change the service password code

PASSWORD ON/OFF: To enable or disable the primary and service passwords.

Pressing the B button multiple times allows to sequentially switch between the 3 selections.



Warning!

The primary password (1) is the only one which grants access to the user password area; as a consequence, it should only be known by the owner of the shop/organisation where the door is installed.

The service password (2), instead, is intended for employees or external workers, who can use it to change the door operating programs, but have no way to change or disable both passwords.



To change password 1, press the A button after selecting PASSWORD 1; the following will be displayed:



Type the new password.
The next screen shall be:



Type the new password again.

Repeat the same sequence to change password 2.

To enable the password, finally, select PASSWORD ON/OFF through the A button, then select ON through the D button (On).

After enabling the password and optionally changing the code, press the SET button to exit this area and return to the main screen.

To disable the user password, select PASSWORD ON/OFF through the A button, then select OFF through the B button (OFF).

Now, after the selector has switched to “Screen Saver” mode, every time the SET button is pressed the selector will prompt the user to type the password to gain access to the program change.

TECHNICAL AREA

By means the T-EASY you can set the selector option and language.

Hold the **SET** button pressed for about 2 seconds to enter the technical area.

The following are the 2 menus available in the technical area:

3 -- SELECTOR OPTION

4 -- LANGUAGE

To switch from the menù 3 to menù 4 press the B button;
to enter the menù press the A button.

3-SELECTOR OPTION

This menu allows to customise the T-EASY selector.

As mentioned in the "DAY-TO-DAY USE" paragraph, it allows to select 6 different operating programs, to enable a reduced opening during winter and to activate a set of special functions through the C button. In a simple installation, these choices are often unnecessary and could confuse the end user. For this reason the undesired operating programs and the buttons associated with special functions can be filtered out on the selector.

When the menu is accessed, the first customisable parameter is displayed:

The AUTO operating program

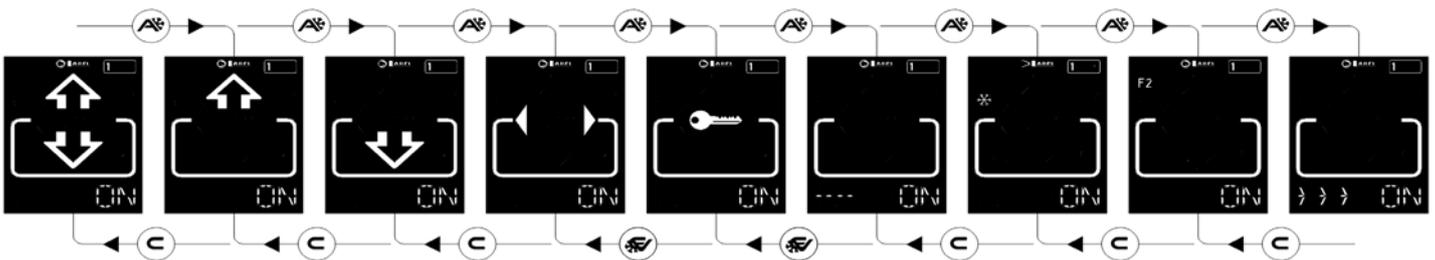
The current state of this parameter is displayed in the right section of the alphanumeric character line:

ON = enabled

OFF= disabled

To change the parameter state, press the B button to disable it (OFF) or the D button to enable it (ON).

To move to the next customisable parameter, press the A button; to return to the previous customisable parameter, press the B button.



The customisable parameter sequence is the following:

- AUTO operating program
- EXIT operating program
- ENTER operating program
- OPEN operating program
- LOCK operating program
- OFF operating program
- A function button (winter reduced opening)
- C function button (F2 special functions)

The last customisable parameter, finally, is:

- Selector activation with “**SLIDE**” (>>>)

This function allows to activate the selector, when it is in screen saver mode, by just swiping with a finger from left to right in the bottom section of the digital selector, near the A-SET-B buttons. Although not an actual password (which anyway can be set as described in the paragraph “USER PASSWORD MANAGEMENT”), it still allows to ensure that the operating program adjustment menu can only be accessed if one is aware of this option.

Warning!

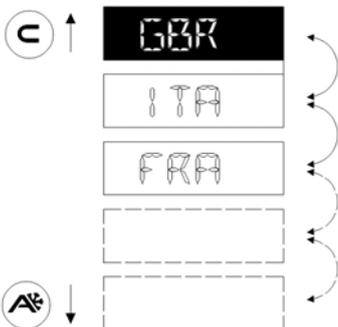


The operating programs whose state is OFF shall no longer be displayed, but the selection will switch to the first available program whose state is ON; accordingly, the A() and C(F2) buttons shall have no effect if their state is set to OFF.*

After setting the customisation options, press the SET button to return to the main page of the technical area.

To exit the technical area and return to the main screen, press SET again.

4-LANGUAGE



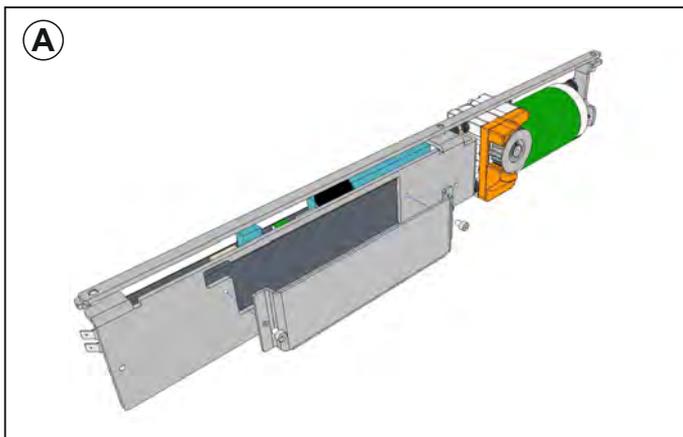
This menu allows to select the language for the operating program description.

Scroll the available languages using the A (down) or C (up) buttons until you find the desired one. Then press the SET button to confirm and exit this menu.

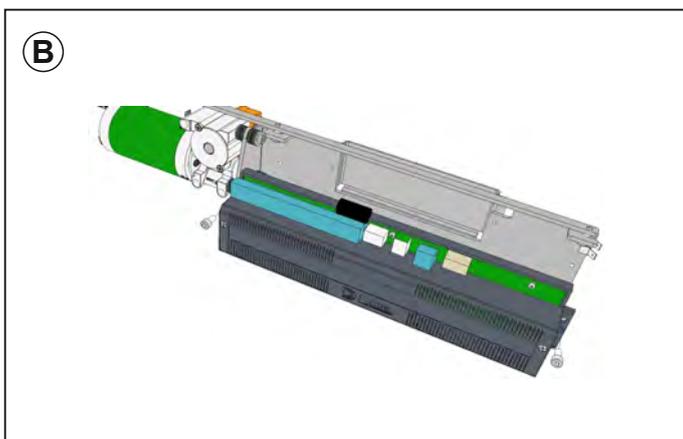
17) BATTERY-POWERED EMERGENCY OPENING DEVICE

17.1) ET-BAT90

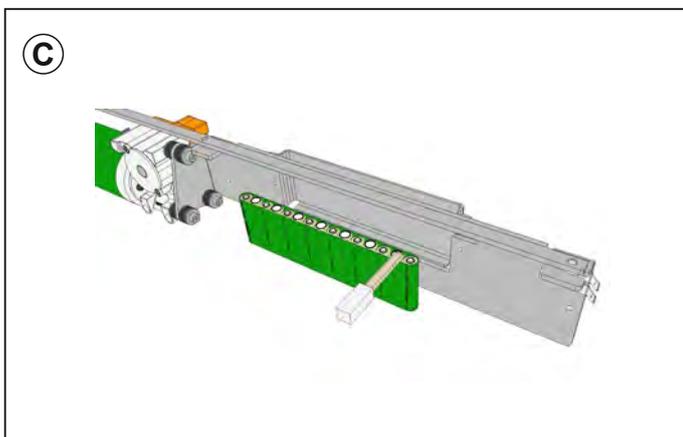
Assembly of the battery pack



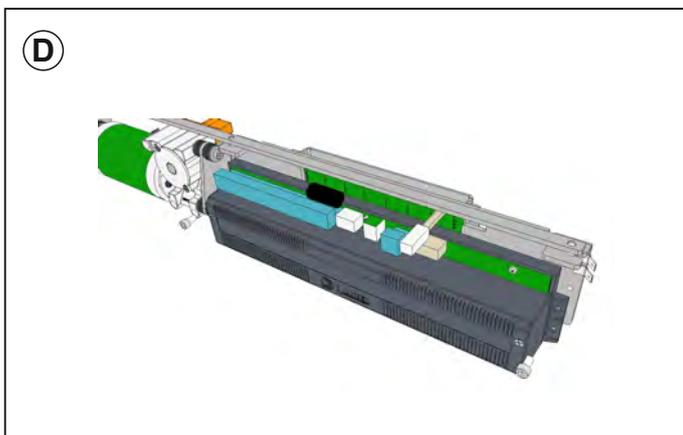
The battery containment plate is mounted on the back of the module ET-DRIVE/EASY using the hexagon socket head cap screws 4x6.



Remove the container of the electronic control unit by unscrewing the two screws M5x10.



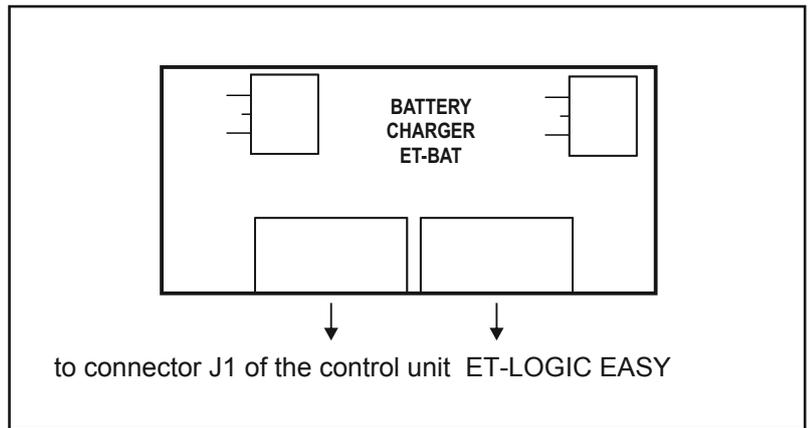
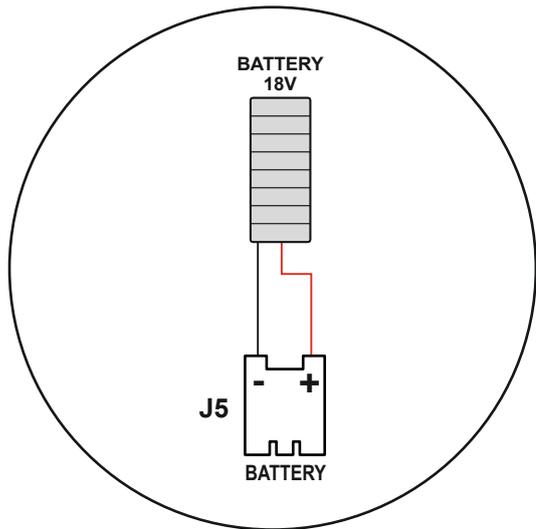
Position the battery inside the plate.



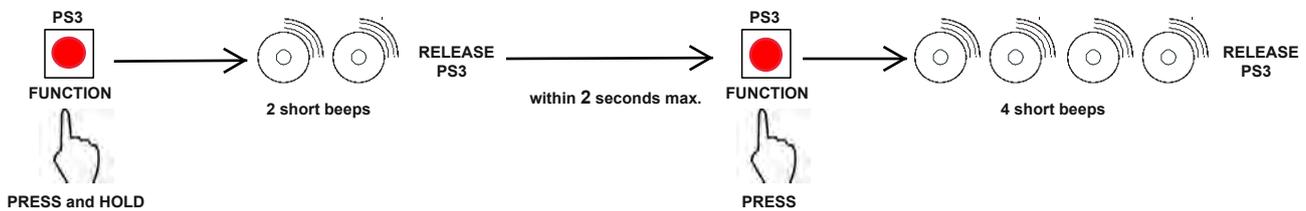
Refit the container of the electronic control unit inserting the battery cable through the slot at the top and tighten the screws M5x10.

To replace the battery, perform the operations described in steps B, C and D.

Connect the battery to connector J5 on control board ET-LOGIC-EASY.
 Insert the battery charger into the J1 connector of the control unit ET-LOGIC-EASY.
 The battery charger self-checks the battery charge level and displays a green and a red led (see table "LED SIGNALLING")



To activate the battery pack operation, follow the steps shown below (the same learning procedure for the dip switches and potentiometers described in the paragraph "Function and potentiometers").



Operation

The ET-BAT90 device trips in case of mains power failure, allowing the ETERNA 90 EASY operator to keep running.
 The battery operating time depends on various factors, like the number of operations performed, the leaf weight, the connected external devices , etc....

The charged battery can supply energy for approximately 20 continuous door opening/closing cycles.

IMPORTANT!

BATTERY TYPE: NiMH, 18V - 700mAh

LED SIGNALLING

SIGNALLED EVENTS	LED 2 GREEN	LED 2 RED
BATTERY DISCONNECTED	ON	ON
BATTERY CHARGING	BLINKING	OFF
BATTERY CHARGED WITH MAINS VOLTAGE	ON	OFF
BATTERY DISCHARGED	OFF	BLINKING
BATTERY CHARGED WITHOUT MAINS VOLTAGE	OFF	ON

WARNING!

- Periodically check battery efficiency
- To allow recharging batteries must always be connected to the electronic control unit
- The equipment must be disconnected from the mains when removing the batteries
- In case of replacement, always use genuine batteries.
- Replacement must be performed by qualified personnel
- Remove batteries from the equipment before its disposal
- Batteries contain polluting substances; therefore they must be disposed of in accordance with the provisions of local regulations

17.2) BATTERY DEVICE ET-BAT90P

BATTERY TYPE: RECHARGEABLE SEALED LEAD



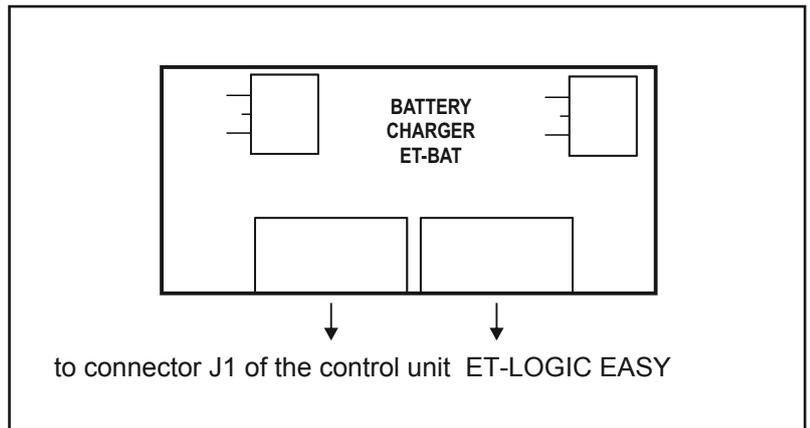
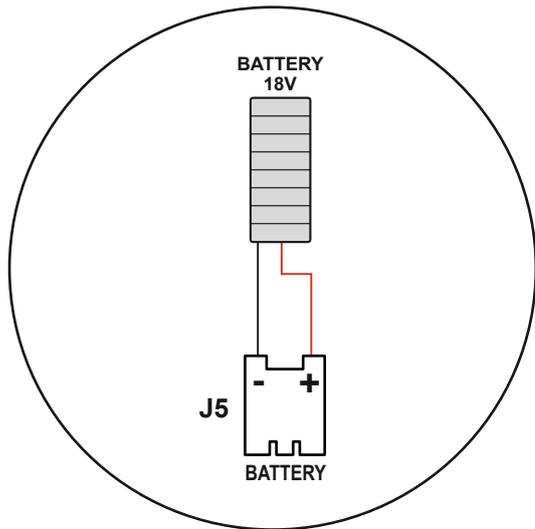
SPECIFICATIONS

Nominal Voltage	18V (3x6V)
Nominal Capacity	1.3Ah
Operating Temperature Range	-15°C to 50°C

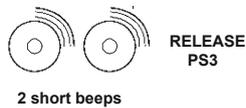
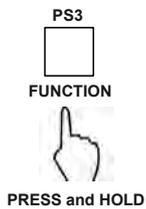
BATTERY PACK location inside the ETERNA 90 EASY automation



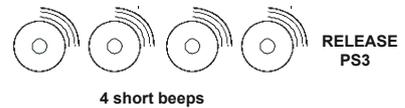
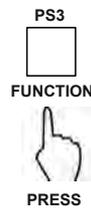
Connect the battery to connector J5 on control board ET-LOGIC-EASY.
 Insert the battery charger into the J1 connector of the control unit ET-LOGIC-EASY.
 The battery charger self-checks the battery charge level and displays a green and a red led (see table "LED SIGNALLING")



To activate the battery pack operation, follow the steps shown below (the same learning procedure for the dip switches and potentiometers described in the paragraph "Function and potentiometers").



within 2 seconds max.



Operation

The ET-BAT90P device trips in case of mains power failure, allowing the ETERNA 90 EASY operator to keep running.
 The battery operating time depends on various factors, like the number of operations performed, the leaf weight, the connected external devices, etc....

The charged battery can supply energy for approximately 1 hour continuous door opening/closing cycles.

IMPORTANT!
BATTERY TYPE: Lead battery, 18V - 1,2Ah

LED SIGNALLING

SIGNALLED EVENTS	LED 2 GREEN	LED 2 RED
BATTERY DISCONNECTED	ON	ON
BATTERY CHARGING	BLINKING	OFF
BATTERY CHARGED WITH MAINS VOLTAGE	ON	OFF
BATTERY DISCHARGED	OFF	BLINKING
BATTERY CHARGED WITHOUT MAINS VOLTAGE	OFF	ON

WARNING!

- Periodically check battery efficiency
- To allow recharging batteries must always be connected to the electronic control unit
- The equipment must be disconnected from the mains when removing the batteries
- In case of replacement, always use genuine batteries.
- Replacement must be performed by qualified personnel
- Remove batteries from the equipment before its disposal
- Batteries contain polluting substances; therefore they must be disposed of in accordance with the provisions of local regulations

18) PRJ38 PHOTOCELLS

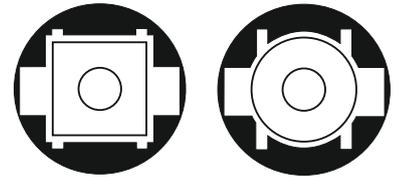
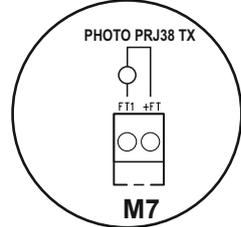
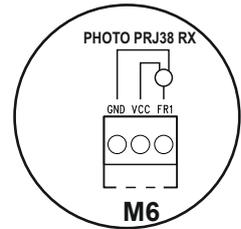
The pair of PRJ38 Label photocells consists of a transmitting and a receiving capsule.
 The transmitting capsule, besides, is equipped with a 2-wire cable bearing the PRJ38-TX mark, while the receiving capsule has a 3-wire cable bearing the PRJ38-RX mark.
 Drill an 11.5 mm hole to fasten the capsules into the fixture.
 To avoid any interference due to exposure to direct sunlight we recommend that you install the receiving capsules on the side that is best protected against sun rays.

Photocell operation mode

The PRJ38 photocell is used as a safety sensor during closing movement.
 To ensure proper operation the photocells must be perfectly aligned and at the same height.

- The PRJ38 photocell must be enabled by the dip-switch 7 of S2 = ON.
- PRJ38 works as stop command if dip-switch 8 of S2 = OFF
 The activation of the photocell stops the door motion and the control unit buzzer beeps 4 times.
- PRJ38 works as safety in closing if dip-switch 8 of S2 = ON
 The activation of the PRJ38 photocell during closing cycle reverse the motion of the door.

The led 3 (photo PRJ38) light on when photocell detects a presence.



RECEIVING TRANSMITTING

• TERMINAL BOARD M6

- FR1** = PRJ38 PHOTOCCELL receiving capsule signal (brown cable).
VCC = power supply positive for the receiving capsule (blue cable).
GND = power supply negative for the receiving capsule (black cable).

• TERMINAL BOARD M7

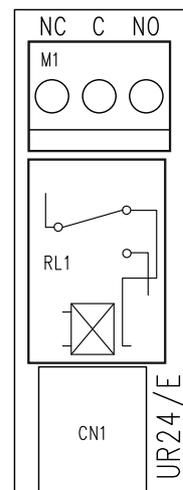
- +FT** = power supply positive of the transmitting capsule (blue cable).
FT1 = PRJ38 PHOTOCCELL transmitting capsule signal (brown cable).

19) UR24 MODULE

The UR24 module is an optional interface board equipped with a relay (C - NA - NC clean contact), designed to be inserted into the OUT1 output connector of the ET-LOGIC-EASY electronic control unit.
 MAX CAPACITY RELAY CONTACT = 1A - 24Vdc; 0,5A - 120Vac

The output is active when the door is moving or open, while it disables when the door is closed.

The UR24 module can be used to drive an air blade or to signal the door status.



20) RADIORECEIVER EN/RF1

1 - GENERAL INFORMATION

The EN/RF1 single-channel receiver is a 433.92 MHz radio receiver designed to open the automatic door ETERNA EASY 90 using the transmitters manufactured by Label. In Table 1 there is a list of radio transmitters produced by LABELSpa.

2 - DESIGNED USE

The EN/RF1 receiver must be coupled to the J8 connector of the ET-LOGIC-EASY electronic control unit and it is preset to control the opening of the automatic door in all automation work programs.

The opening command of the automatic door is given with the radio control, but movement protection and safety are delegated to external organs.

It shall never be used in any case where the door activation or deactivation may cause injuries and damage.

Receiver in class 3 according to the standards ETSI EN 300-220-1 V.2.1.1 (2006-04) chapter 4.1.1.

3 - INSTALLATION OF THE RECEIVER

Couple the receiver EN/RF1 (fig. 1) to connector J8 of the electronic control unit ET-LOGIC-EASY (fig.2).

Proceed with saving the radio-controls (fig.3) as follows:

- a) Enter the programming mode of the transmitters pressing and holding the button SW1 until the led L1  is steadily lit (approx. 3 seconds).
- b) Press the button of the transmitter to be saved. Successful saving will be indicated by 5 fast flashings of the led L1 .
- c) Then LED L1 will turn on steadily and it will be possible to store another transmitter by repeating the operation described in point b), and so forth for all the transmitters to be used.
 - A maximum of 250 transmitters can be saved on the receiver.
- d) Once the transmitter saving procedure is finished, exit the programming mode by pressing and holding the button SW1 until the led L1  turns off.

4 - USE OF THE RADIO CONTROL

By pressing the button of a saved transmitter, the automatic door opens and the led L1 of the receiver remains on until the button of the transmitter is released.

The radio control opens the door in all the operating programs of the automation.

5 - RECEIVER MEMORY ERASURE

Should it be necessary to erase all the saved transmitter codes from the memory of the EN/RF1 receiver, proceed as follows:

- a) Extract the receiver EN/RF1 from the connector of the control unit ET-LOGIC-EASY.
- b) Hold the receiver SW1 button pressed and then couple again the EN/RF1 receiver to the J9 connector of the ET-LOGIC-EASY control unit.
- c) Release the button SW1 from the receiver EN/RF1 only after the LED L1 of the receiver will start flashing.
Now the LED L1 of EN/RF1 blinks fast  to indicate that the receiver is ready to save the codes of all the transmitters of the LABEL range, both rolling code and dip switch ones.
If you only wish to save the rolling code transmitters (SPYCO model), excluding all dip switch models, briefly push the SW1 button; the L1 led will blink slowly  to indicate that the receiver is ready to only save the SPYCO transmitter codes.
To switch from one mode to the other, press the button SW1.
- d) After selecting the desired mode, hold the SW1 button pressed for about 3 seconds until the led L1  begins blinking very fast for about 8 seconds, signalling the receiver memory is being erased.
- e) When the memory of the receiver EN/RF1 has been erased, the LED L1 will turn off.
- f) Now it is possible to save again the code of the transmitters to be used, following the procedure described in paragraph 3.

6 - TECHNICAL SPECIFICATIONS

- | | |
|--|----------------------------------|
| ● Power supply | 12Vdc |
| ● Power draw | 10mA at rest - 50mA in operation |
| ● Outputs | OPEN COLLECTOR |
| ● Frequency | 433.92 Mhz |
| ● Memory Capacity | 250 users |
| ● Range without obstacles | 30 meters |
| ● Operating temperature | -20° / +55° |
| ● Receiver class (ETSI EN 300-220-1 Chapter 4.1.1) | Class 3 |

7 - DECLARATIONS

Marketing, sale and use are valid without restrictions in all EU countries.

With this document Label SpA declares that the receiver EN-RF1 complies with all the essential requirements and with all other relevant provisions established by the directive RED 2014/53/EC.

The declaration of conformity is annexed to the EN/RF1 receiver instructions.

TABELLA 1 - TABLE 1 - TABLEAU 1 - TABLA 1
 trasmettitori Label - Label transmitters - transmetteurs Label - transmisores Label

ROLLING CODE	DIP-SWITCH			
SPYCO/1E SPYCO/3E	MDW/1E MDW/2E	TYKO/1E TYKO/2E	RJW/1E RJW/2E	RJW/4E RJW/12E

SIGNIFICATO LED - LED MEANING - SIGNIFICATION LED - SIGNIFICADO DEL DIODO EMISOR DE LUZ

	LED SPENTO - LED OFF - LED ÉTEINTE - DIODO EMISOR DE LUZ APAGADO
	LED ACCESO - LED ON - LED ALLUMÉE - DIODO EMISOR DE LUZ ENCENDIDO
	LED LAMPEGGIANTE LENTO - LED BLINKING SLOW - LED À CLIGNOTEMENT LENT DIODO EMISOR DE LUZ DESTELLANDO LENTO memorizzazione dei trasmettitori rolling code (SPYCO) - saving of rolling code (SPYCO) transmitters under way mémorisation des transmetteurs rolling code (SPYCO) - memorización de los transmisores rolling code (SPYCO)
	LED LAMPEGGIANTE VELOCE - LED BLINKING FAST - LED À CLIGNOTEMENT RAPIDE DIODO EMISOR DE LUZ DESTELLANDO RÁPIDO memorizzazione di tutti i modelli di trasmettitori Label - saving of all Label transmitter models under way mémorisation de tous les modèles de transmetteurs Label - memorización de todos los modelos de transmisores Label
	LED LAMPEGGIANTE MOLTO VELOCE - LED BLINKING VERY FAST - LED À CLIGNOTEMENT TRÈS RAPIDE - DIODO EMISOR DE LUZ DESTELLANDO MUY RÁPIDO cancellazione memoria - memory cancellation - effacement mémoire - borrado memoria

FIG. 1

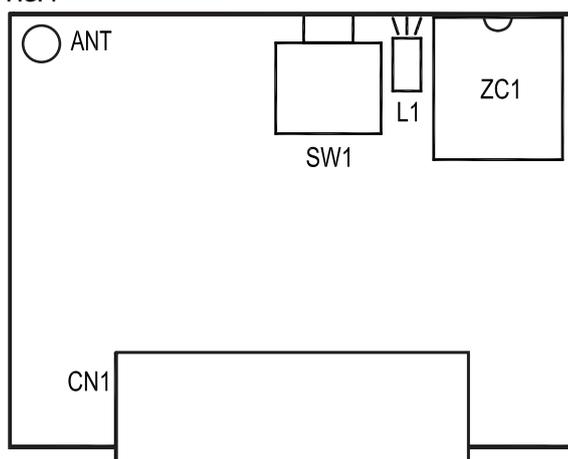


FIG. 2

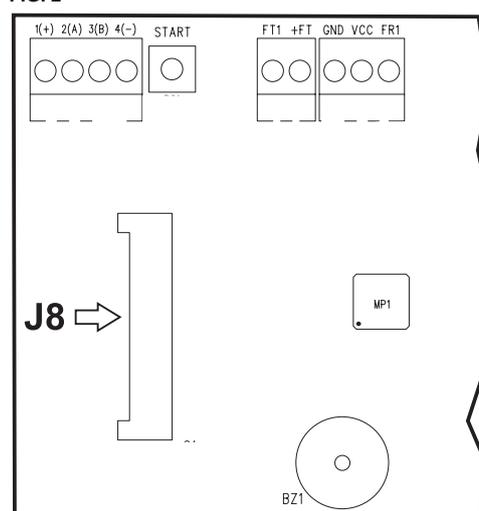
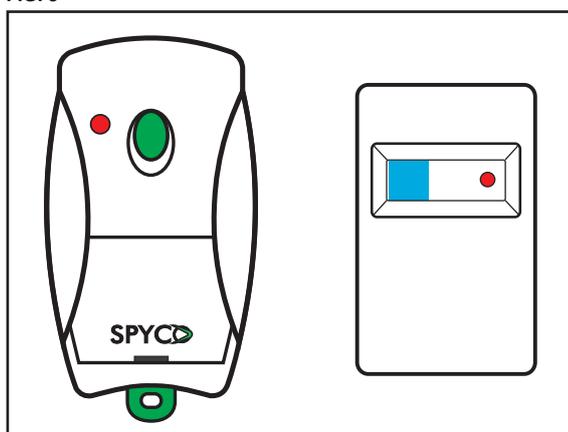


FIG. 3



21) MEANING OF BUZZER WARNING SIGNALS

The ET-LOGIC-EASY control unit of the automation is equipped with a buzzer emitting a set of warning signals, whose meaning varies according to the number of emitted beeps and to the signal duration.

WARNING SIGNAL (BEEP)	MEANING
5 short and fast BEEPS	Automation not set-up when powered.
4 BEEPS	Intervention on the STOP command.
4 BEEPS	Intervention on the PRJ38 photocell.
4 short BEEPS	Set-up cycle initial phase starting warning.
Extended sound (3 seconds)	Signals the end of the initial set-up.
Extended and intermittent sound (during motion)	The power limit that the automation can supply to the motor is exceeded while the leaf is in motion.
1 BEEP	After powering the automation (already started up before).
1 BEEP (before the opening)	Failed opening safety sensor test.
1 BEEP (before the opening)	Battery failure or low battery charge warning.
2 BEEPS (when the door is open)	Failed closing safety sensor test.
1 extended BEEP (1")	Detection of an internal system failure.

22) MAINTENANCE PROGRAM

To ensure that the automatic door keeps running safely over time, we recommend to carry out the maintenance operations once every 6 months.



Warning!

Before performing any operation on the automation, cut off the mains power supply.

- Check that all screws are tight.
- Check the belt's tension.
- Clean the carriage sliding rail and the ground sliding guide.
- Check that carriages and leaves are properly aligned and that the door's final ledge is in correct position.
- Check that the electric lock - if any - is properly fastened and that the mechanical release device operates properly.
- Check connections and electric cables
- Check leaf stability and make sure that movement is smooth and frictionless along the whole run.
- Check that motion speeds, involved forces, and installed safety devices are working appropriately.
- Clean sensors and check that presence detectors activate properly.



Warning!

Any potentially damaged or worn component must be replaced.

Make use only of original spare parts; for this purpose check LABEL Parts list.

DECLARATION OF INCORPORATION OF PARTLY ASSEMBLED MACHINERY

Manufacturer: Label S.p.A.

Address: Via Ilariuzzi 17/A - 43126 San Pancrazio Parmense, PARMA - ITALY

Declares that: the automation, mod. ETERNA 90 EASY (type ETERNA-90 EASY S, ETERNA-90 EASY D)

Serial Number:

realized to control pedestrian automatic sliding doors
is in conformity with the essential safety requirements of the following Directives:

- Low voltage directive LVD 2014/35/EU
- Electromagnetic compatibility directive EMC 2014/30/EU

Label declares that the automation ETERNA 90 EASY has been realized to be incorporated in a machinery or to be assembled with other devices to constitute a machinery covered by Machine Directive 2006/42/EC.

Harmonized European regulations applied:

EN 13849-1
EN 13849-2
EN 61000-6-2
EN 61000-6-3
EN 60335-2-103
EN 16005

Also declares that it is not allowed the commissioning of the product indicated until the final machinery in which the product is incorporated is declared in conformity according to the Machinery Directive 2006/42/EC.

Label undertake to submit, upon suitably justified request of the national authorities, information related to the partly completed machinery.

PERSON AUTHORIZED TO ESTABLISH THE TECHNICAL DOCUMENTATION:

Bruno Baron Toaldo
Via Ilariuzzi, 17/A
43126 - San Pancrazio P.se - Parma

Parma, 26/02/2020

The Chairman
Bruno Baron Toaldo



ETERNA EASY
Made in Italy by



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AZIENDA CERTIFICATA
'SISTEMA QUALITA'
UNI EN ISO 9001:2000