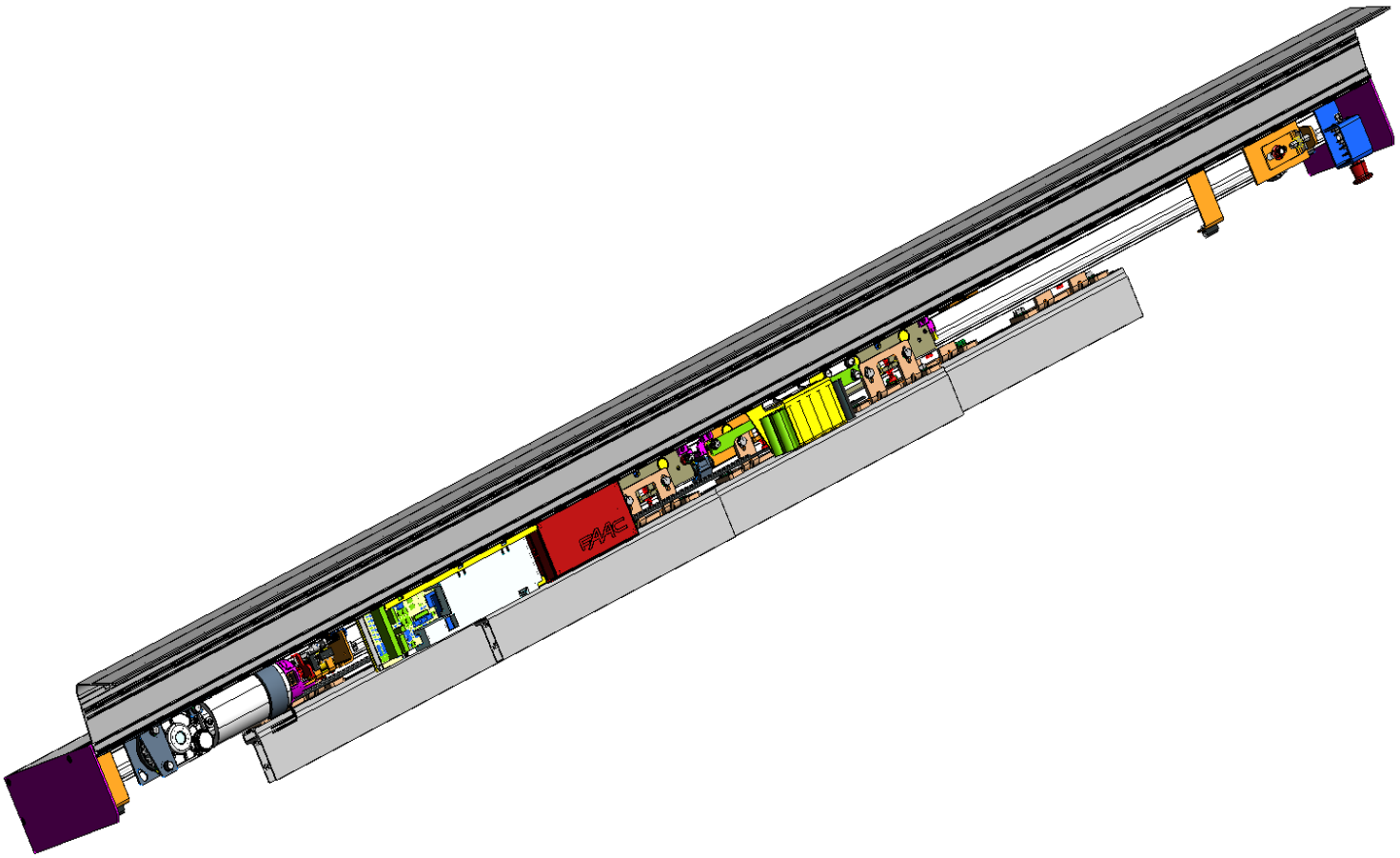
A140 AIR-T



safe zone

green tech

EN16005

FAAC

FAAC ENGLISH

SD-KEEPER PROGRAMMING UNIT

The SD-Keeper is used for selecting operational functions, and for controlling and programming sliding automatic doors.
It is divided into two parts: a fixed part used for selecting the operating functions by means of push-buttons and relevant signalling LEDs (fig. 61 ref. A), and a pull-out part with LCD display to access complete programming (fig. 61 ref. B).
The SD-Keeper display can be used as a temporary programming unit: after all programming and adjustments have been carried out, it can be fully removed because the settings remain stored on the control board.
When the display is removed, a cover is provided (fig. 61 ref. C).

SD-Keeper can be disabled by a combination of keys (see the special LOCK function) or by internally fitting a jumper by means of a switch (fig.62 ref. LOCK).

FITTING

Refer to fig. 62 for an exploded view of fitting. Let cable route through point A or B according to the cable position needs.

CONNECTIONS

Connect SD-Keeper to the control board with the following cable: 2x0.5mm2 max 50m (fig. 62).
If a jumper is closed between two terminals as shown in fig. 62 (LOCK), all keys on the programmer are disabled.

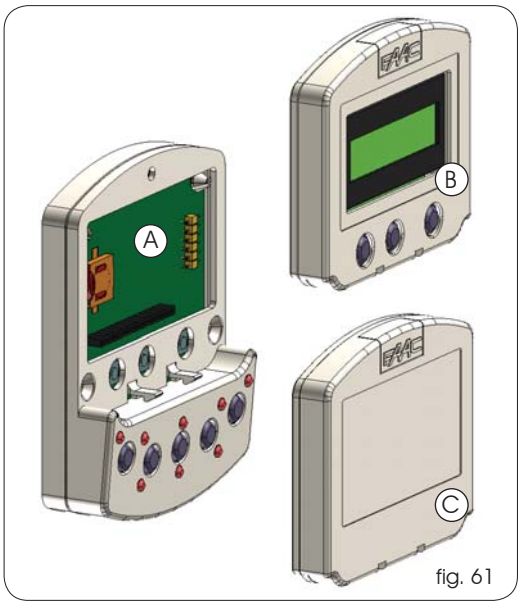


fig. 61

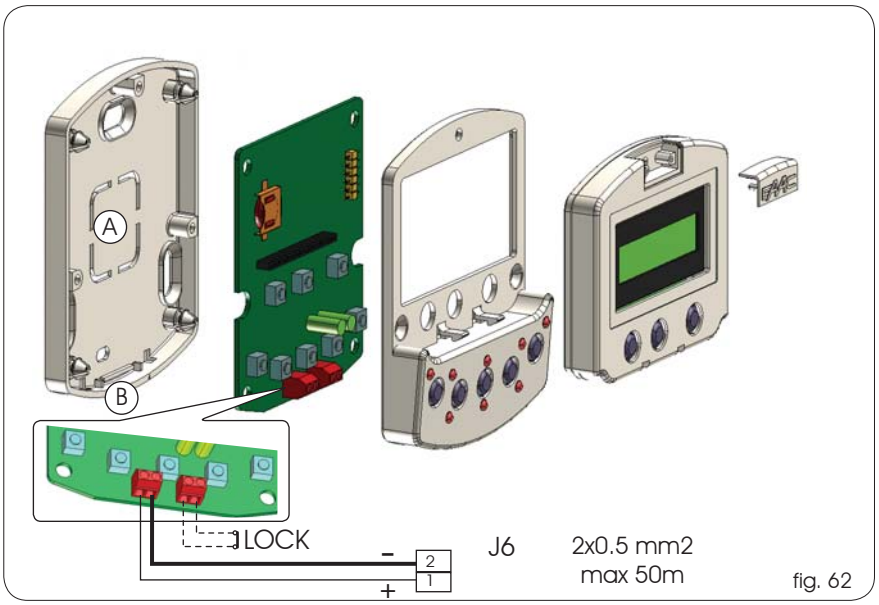


fig. 62

DIAGNOSTICS

SD-Keeper (also without display) has a diagnostic function which, in case of an alarm, interrupts normal display of the function every 2 seconds in order to show the fault status for 1 second by a combination of flashing LEDs.
Consult fig.63 and table 1 to identify the type of alarm by interpreting the flashing LEDs.
If there are several simultaneous faults, the first to be detected is shown.

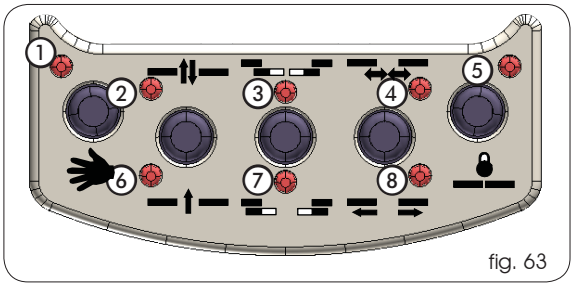


fig. 63

Tab.1 DIAGNOSTICS			Led ● =on ○=off							
DESCRIPTION		MEANING	①	②	③	④	⑤	⑥	⑦	⑧
	ENERGY SAV.	Operating on low battery consumption	○	●	○	○	○	○	○	○
2	BAT. OPERATION	Door operating on battery	○	○	●	○	○	○	○	○
3	FORCED OPEN	Door forced opening in progress	○	○	●	○	○	○	●	○
4	FLAT BATTERY	Battery discharged: emergency movement not guaranteed	○	○	○	●	○	○	○	○
6	EMERG 2 ON	Emergency 2 input active	○	○	●	●	○	○	○	○
7	EMERG 1 ON	Emergency 1 input active	○	○	●	●	○	○	●	○
8	OBST. IN OPEN.	Opening obstacle detected 3 successive times; Reset necessary to restore operation	○	○	○	○	○	○	○	●
9	OBST. IN CLOS.	Closing obstacle detected 3 successive times; Reset necessary to restore operation	○	○	○	○	○	○	●	●
10	☎	Motor lock locked in closed position	○	○	●	○	○	○	○	●
11	☎	Motor lock locked in open position (with surveillance kit only)	○	○	●	○	○	○	●	●
12	☎	Incorrect power supply to motor	○	○	○	●	○	○	○	●
13	☎	Sensor monitoring test 2 failed on input P2	○	○	○	●	○	○	●	●
14	☎	Sensor monitoring test 1 failed on input P1	○	○	●	●	○	○	○	●
15	☎	Setup not possible	○	○	●	●	○	○	●	●
22	☎	Initialisation process not possible on motor: too much friction or leaf too heavy	○	●	●	●	○	○	○	○
23	☎	Accessory power supply +24 V dc faulty (probable short circuit)	○	●	●	●	○	○	●	○
24	☎	Motor failure	○	●	○	○	○	○	○	●
25	☎	Control board faulty	○	●	○	○	○	○	●	●

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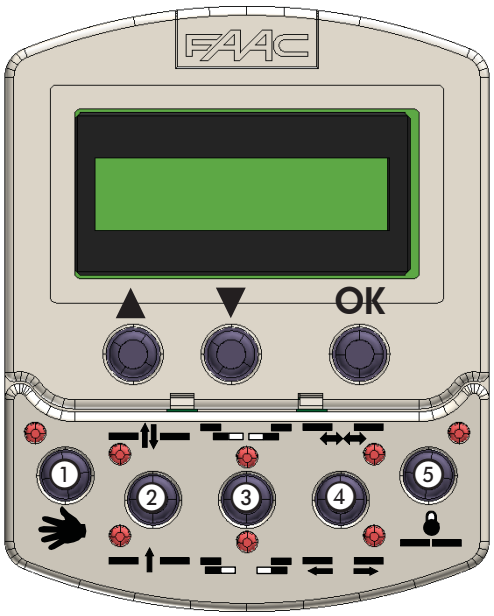

fig. 64

1		MANUAL
2		TWO-WAY
		ONE WAY
3		PARTIAL OPENING
		TOTAL OPENING
4		AUTOMATIC
		DOOR OPEN
5		NIGHT

OPERATING FUNCTIONS

Selection is performed by pressing the keys on the fixed part of the programmer - the function is indicated by the relevant LED lighting up.

when the "Night" or "Manual" modes have been set, the relevant selection keys must be pressed to exit the modes.

Manual

The sliding leaves are free and can be activated manually.

Two-way

Pedestrian transit is possible in both directions; the inside and outside radars are enabled.

One way

Pedestrian transit is possible in one direction only; the external radar is disabled.

Partial opening

The door opens only partially (standard: 50%)
Partial opening can be adjusted in range from 10% to 90% of total.

Total opening

The door opens completely.

Automatico

The door opens (partially or totally) and then re-closes after the set pause time (standard: 2 sec.).
Adjusting range of pause time: 0 to 30 sec.

Door open

The door opens and stays open.

Night

The door closes and the motor lock (if present) is activated. The internal and external radars are disabled.
The Key command causes the door to open and re-close after night pause time elapses (standard: 8 sec).
Adjusting range of night pause time : 0 to 240 sec.
To obtain partial opening in this mode, before selecting the "Night" function, activate the "Partial Opening" function.

SPECIAL FUNCTIONS

Setup

Setup is the door initialisation function during which parameters are self-learned.
To activate, simultaneously press keys ❶ and ❺ for 5 sec.

Reset

Reset is the function for restoring normal operating conditions after some types of alarm have been signalled.
To activate, simultaneously press keys ❷ and ❸ .

Lock

When active, the Lock function disables SD-Keeper.
To activate (and de-activate), simultaneously press keys ❸ and ❹ for 5 sec.

BATTERY INSERTION/CHANGE

To keep the clock inside SD-Keeper active even in the event of a power cut, a 3V model CR1216 lithium battery is provided.
Insert or replace the battery in the compartment on the printed circuit (fig.65) respecting the indicated polarity.

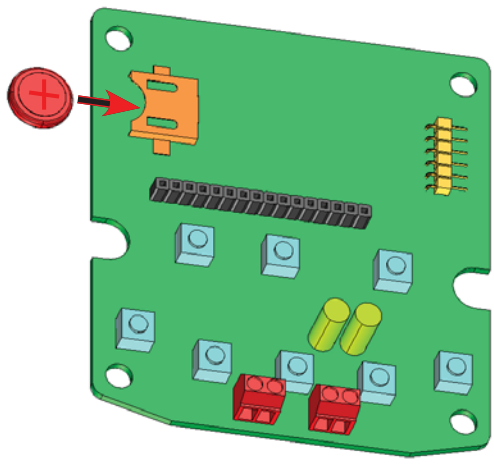

fig. 65

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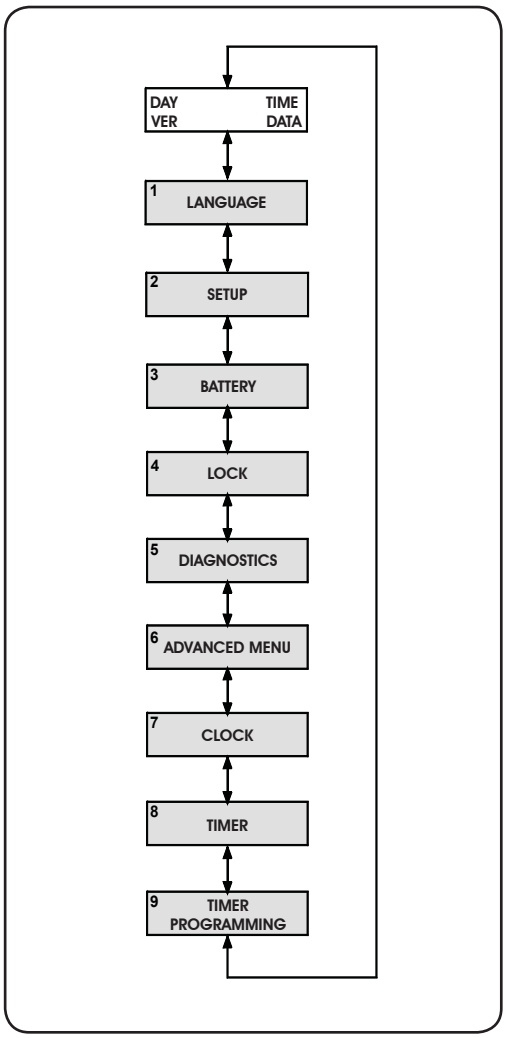
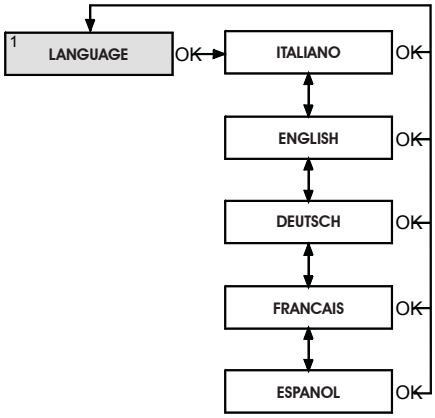
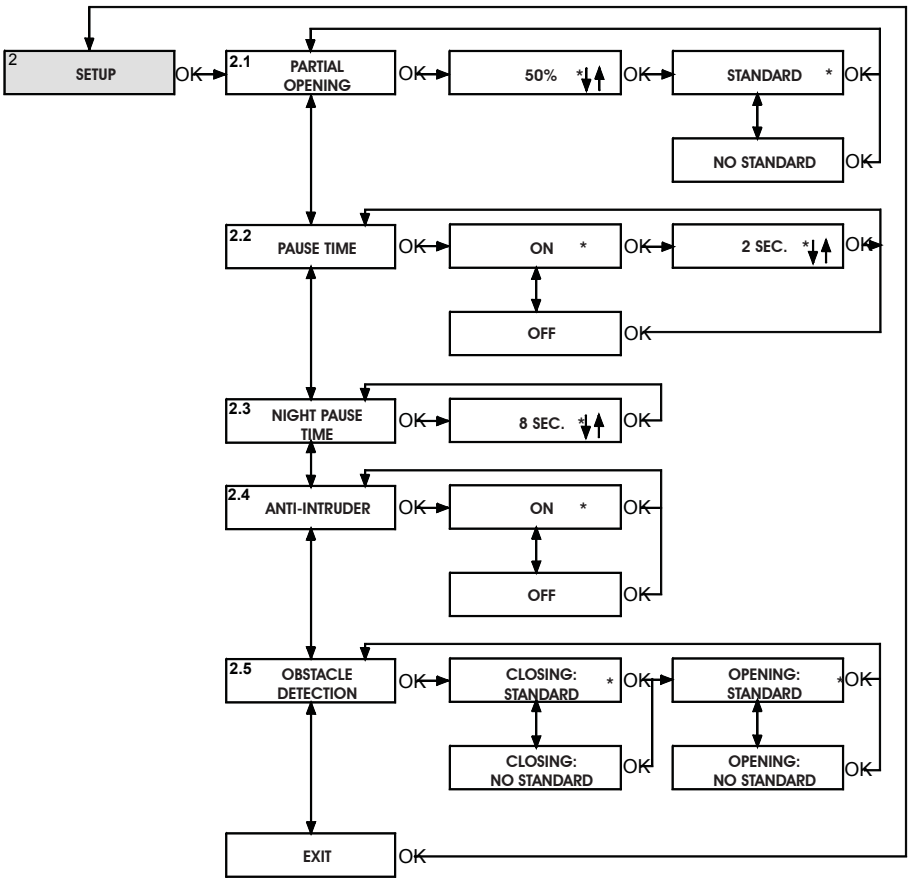
To access programming while the standard view is shown on the display, press any of keys ▲ or ▼ .
Programming is subdivided into main menus (see box) split into subjects.
After selecting the menu with keys ▲ or ▼, to access it press OK.
Each menu is, in turn, subdivided into sub-menus at different parameter setting levels.
Use keys ▲ or ▼ to select (sub-menu or parameter) and confirm with the OK key.
An asterisk on the display indicates the currently active setting.
To exit programming, select the "exit" function at each level. Otherwise, after about 2 minutes, the display automatically returns to standard view.







Important :
With pause time "OFF" you can activate the "Energy Saving" function. Before using this function, consult the chapter "Description and use of Energy Saving ".

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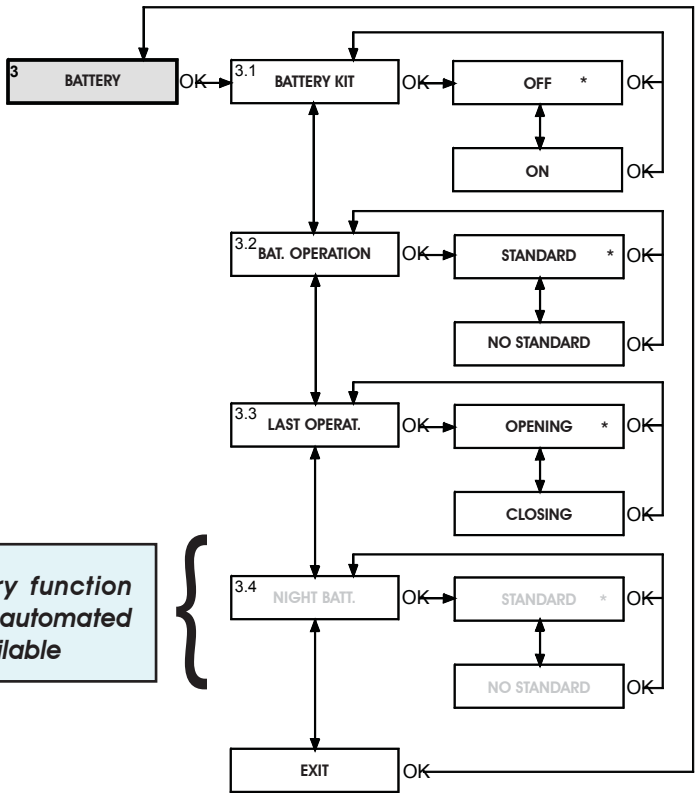
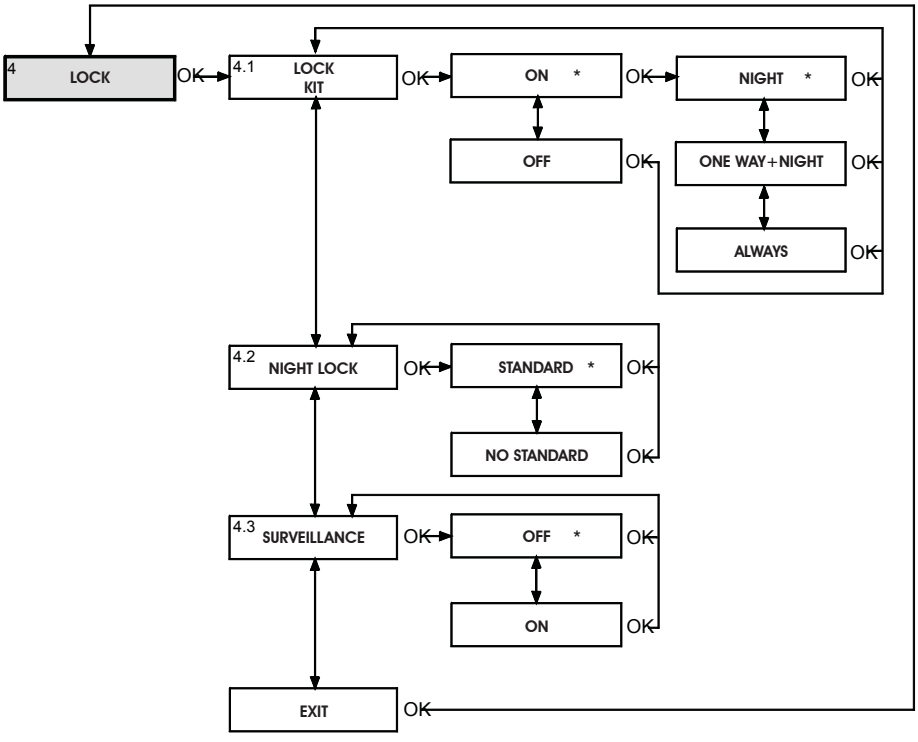
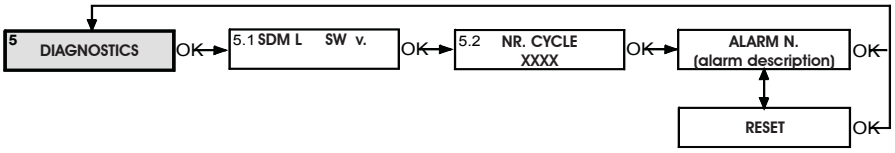


Important :
After having fitted the battery kit, you need to enable it using the SD Keeper programming unit in order to make it operating.

The night battery function in the A140 AIR automated system is not available





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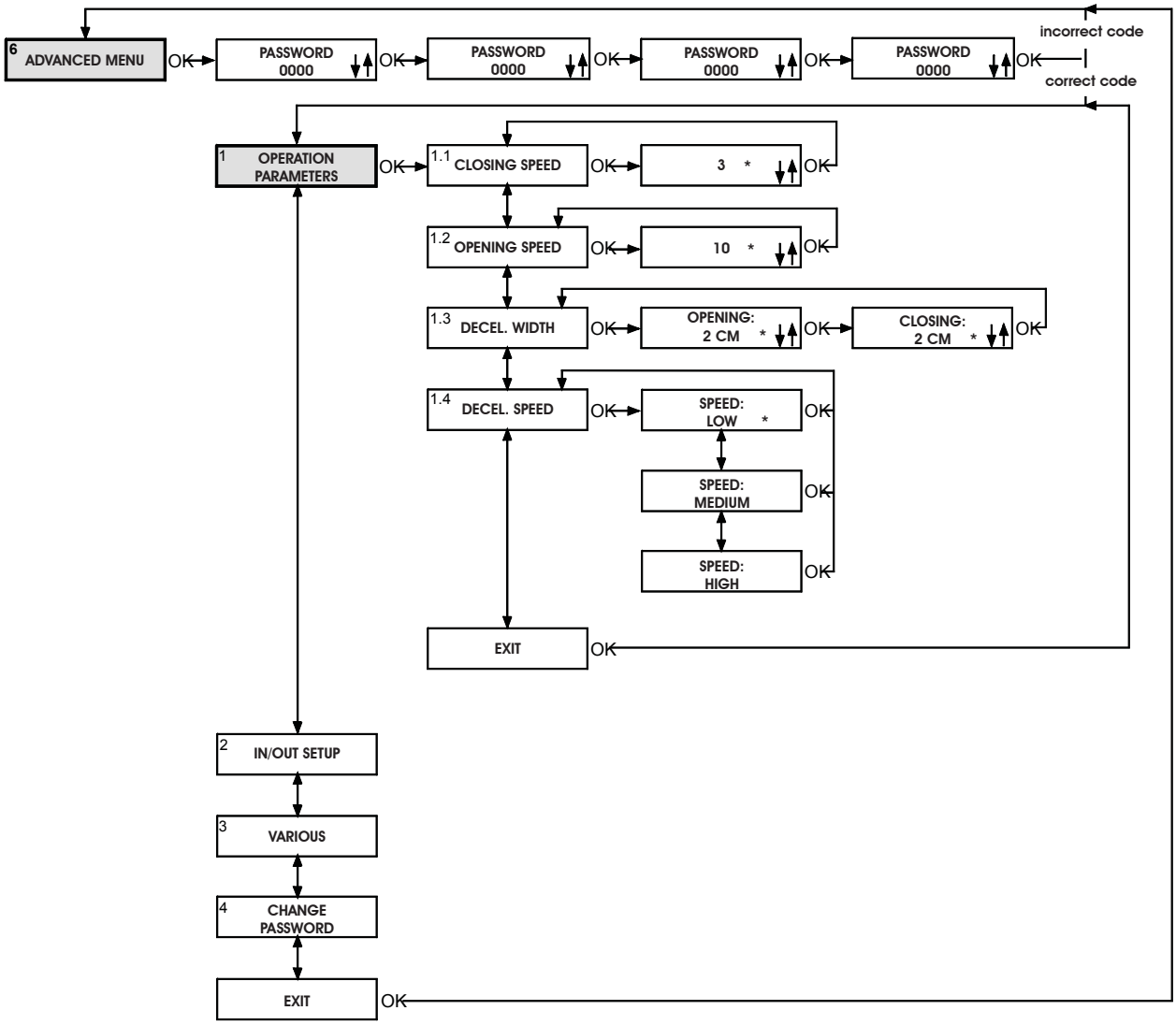

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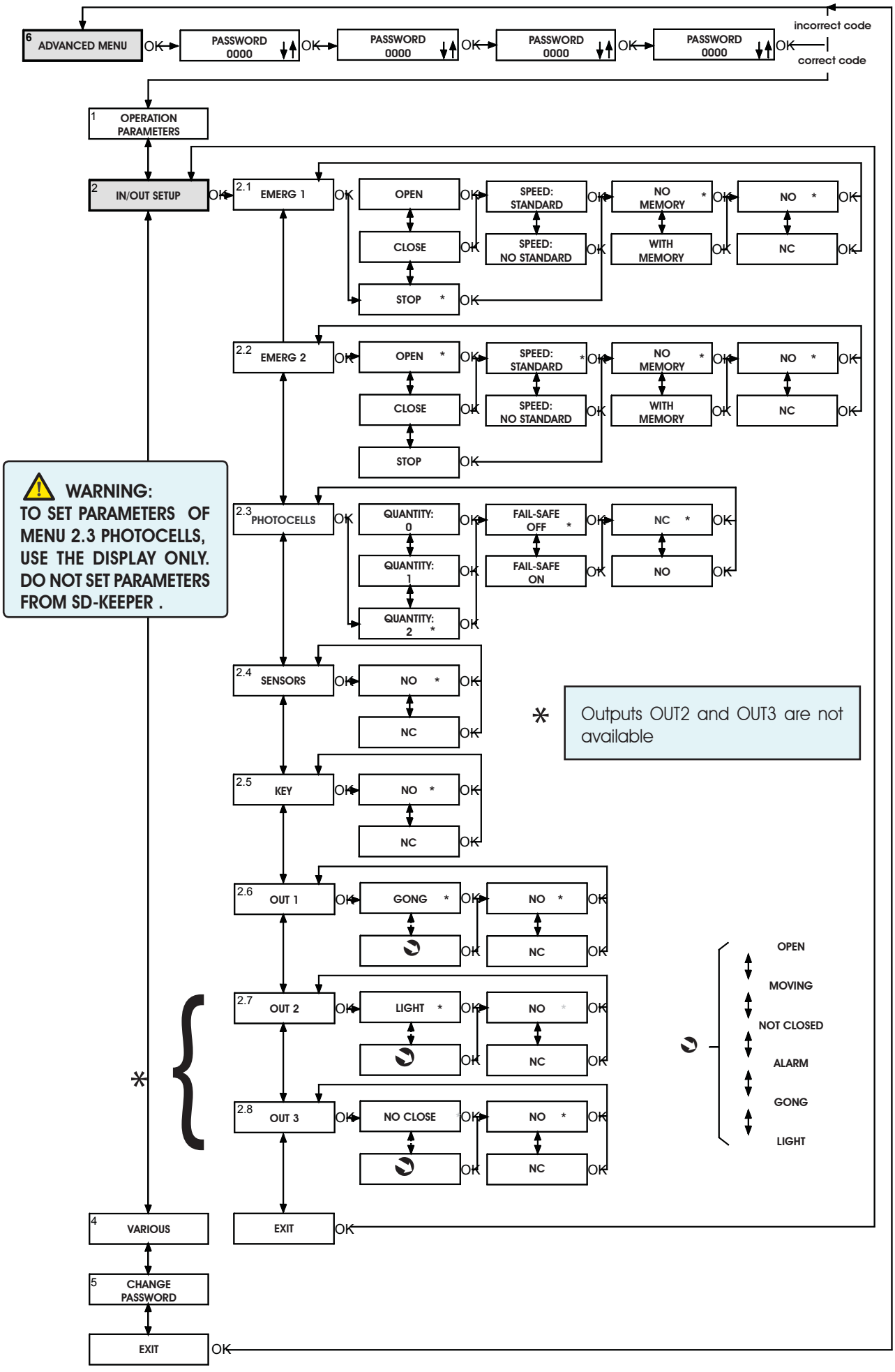

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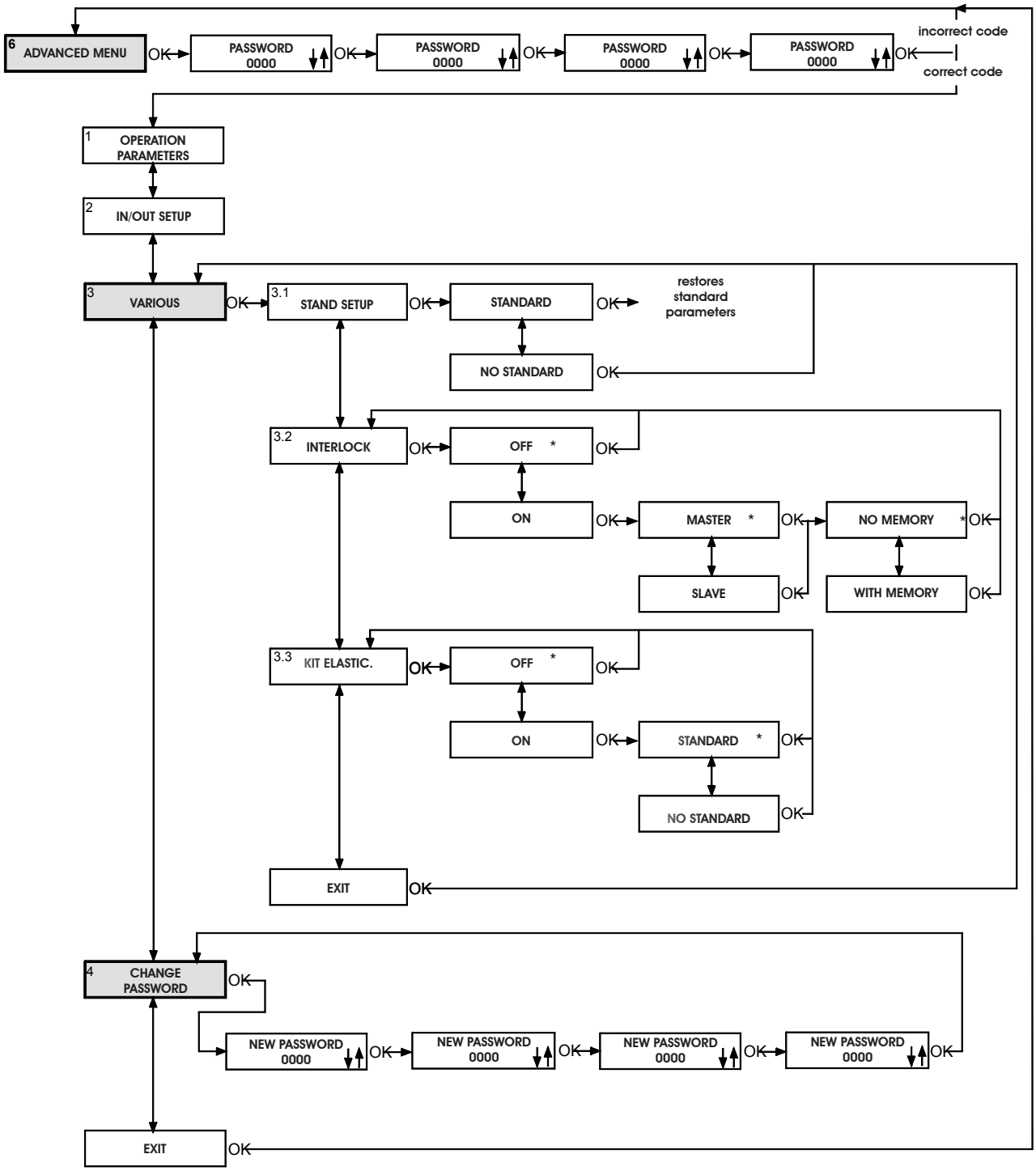

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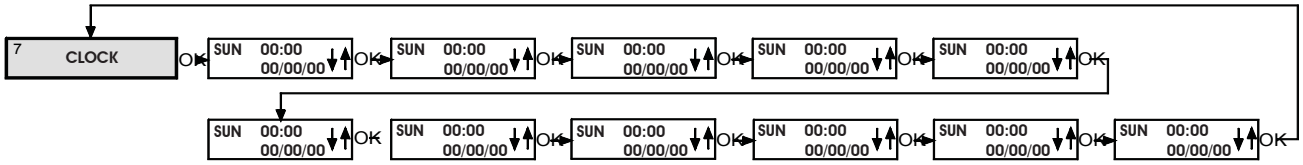

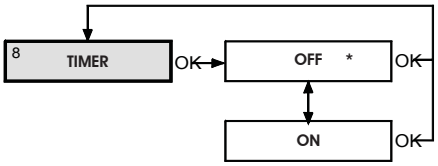

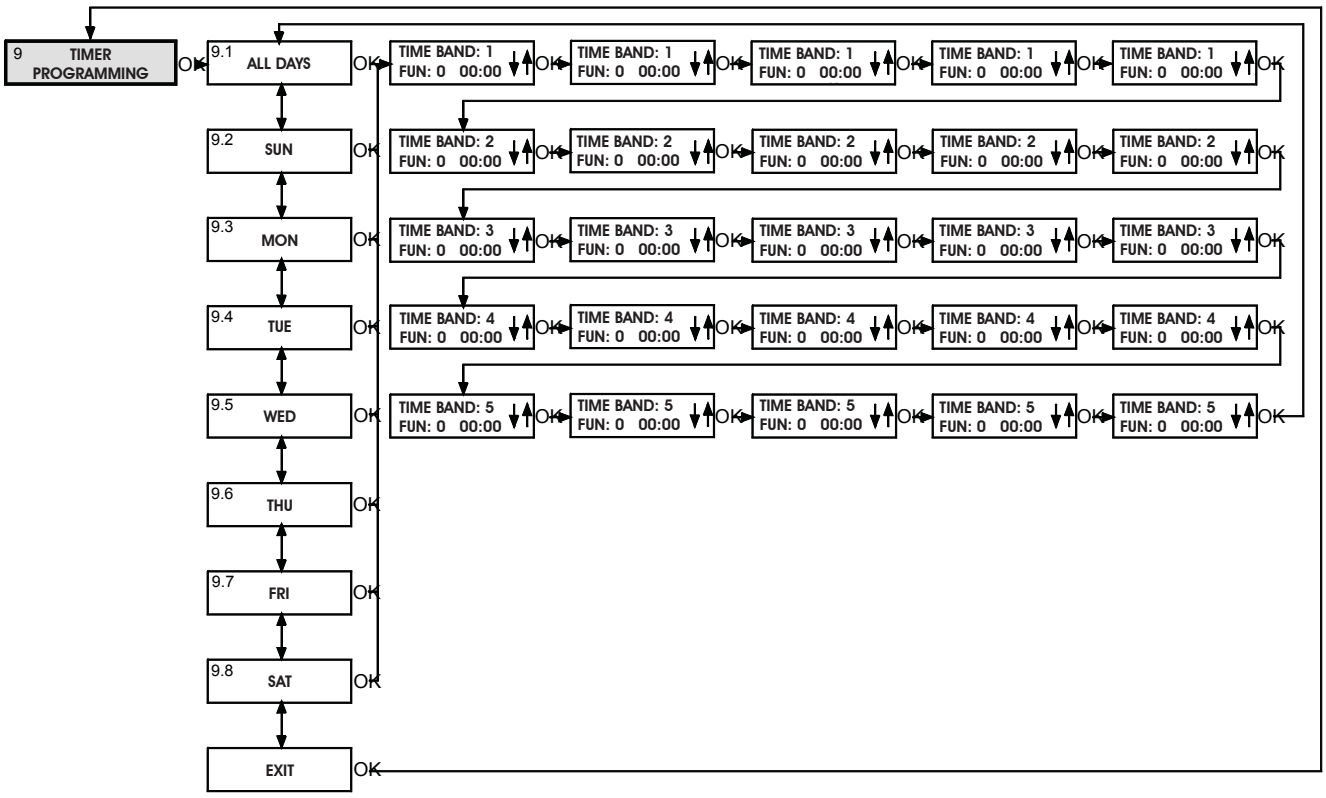

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1 LANGUAGE

Selects the language for showing the messages on the display.

2 SETUP

2.1 Partial opening

Partial opening percentage
Selects the opening percentage (referred to total opening) performed in the "partial opening" operational function.
Standard value: 50%
Adjusting range: from 10% to 90%

Standard
When the "partial opening" operational function is selected, sensor activation always causes a partial opening command.

No Standard
When the "partial opening" operational function is selected, simultaneous activation of the internal and external sensors commands total opening.

2.2 Pause time

On
Pause time enabled in the "automatic" operational function.

Pause time value
If pause time is enabled, it can be set.
Standard value: 2 sec.
Adjusting range: from 0 to 30 sec. in 1 sec. steps

Off
Pause time is disabled and the leaves begin to close as soon as the command elements (e.g.sensors) become inactive.

2.3 Night pause time

Night pause time value
It sets pause time in the "night" operating function when a command is given on the KEY input.
Standard value: 8 sec.
Adjusting range: from 2 to 240 sec in steps of 2.

2.4 Anti intruder

On
In "Automatic" operating mode, the door opposes manual opening attempts by means of contrary force.
During the attempt to open, an alarm is signalled on the control board and on the SD-Keeper (alarm #3 - forced door).
With the door closed, the board continues powering the motor during closing, except when the automated system operates on the battery while the motor is locked.

Off
In "automatic" operating mode, when manual opening is attempted, the door opens automatically and re-closes after any pause time.

In the "night" operational function, the anti-intruder is always active.

2.5 Obstacle detection

Closing: Standard
If an obstacle is detected during closing, the door re-opens.

Closing: No Standard
If an obstacle is detected for 3 consecutive times at closing, the door stops in open position, and causes an alarm signal on the control board and on SD-Keeper (alarm No.9 - obstacle during closing).
To restore operation, resetting is necessary either from the control board or from SD-Keeper.

Opening: Standard
If an obstacle is detected during opening, the door stops for one second and then re-closes.

Opening: No Standard
If an obstacle is detected for 3 consecutive times at opening, the door stops in closed position, and causes an alarm signal on the control board and on SD-Keeper (alarm No.8 - obstacle during opening).
To restore operation, resetting is necessary either from the control board or from SD-Keeper.

3 BATTERY

3.1 Battery kit

Off
Battery kit not installed.

On
Battery kit installed.

3.2 Bat. operation

Standard
If there is a power cut and the operating function is other than "Night", the door continues operating normally until the battery has sufficient charge reserve to perform at least one emergency movement.
The last movement operation to be executed is the one selected with function 3.3.

No Standard
In the event of a power cut, the door executes only the moving operation selected with function 3.3.
As of firmware version 4.5 :
Battery operation and partial opening:
With the last opening motion (No Standard) it immediately effects total opening.
Battery operation and opening safety:
With the last opening motion (No Standard) The door opens, with opening safety engaged, at low speed.

3.3 Last operat.

Opening
During battery operated functioning, the last moving operation is opening (see also function 3.2).

Closing
During battery operated functioning, the last moving operation is closing (see also function 3.2).

3.4 Night batt.

Not available in the A140 AIR 140 automated system.

4 LOCK

4.1 Kit lock

On
Motor lock installed.

Night
The motor lock locks the leaves only in the "night" operational function.

One way+Night
The motor lock locks the leaves in the "night" and "one way" operational functions.

Always
The motor lock locks the leaves whenever they close, irrespective of the set operational function.

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Off
Motor lock not installed.

4.2 Night Lock

Standard
In the "night" operational function, with discharged batteries, the motor lock keeps the leaves locked.

No Standard
Not available in the automated system

4.3 Surveillance

Off
Surveillance device on motor lock not installed.

On
Surveillance device on motor lock installed.

5 DIAGNOSTICS

5.1 SDM L

The software of the control board to which SD-Keeper is connected is shown.

5.2 Nr cycle

The count (non resettable) of the cycles effected by the door is shown.

5.3 Alarm n°

The number and description of the current alarm are shown.

N°	DESCRIPTION	MEANING
	ENERGY SAV.	Operating on low battery consumption
2	BAT. OPERATION.	Door operating on battery
3	FORCED OPEN	Door forced opening in progress
4	FLAT BATTERY	Battery discharged: emergency movement not guaranteed (only on control board display)
6	EMERG 2 ON	Emergency 2 input active
7	EMERG 1 ON	Emergency 1 input active
8	OBST. IN OPEN.	Opening obstacle detected 3 successive times; Reset necessary to restore operation
9	OBST. IN CLOS.	Closing obstacle detected 3 consecutive times; Reset necessary to restore operation
10	☎	Motor lock locked in closed position
11	☎	Motor lock locked in open position (with surveillance kit only)
12	☎	Incorrect power supply to motor
13	☎	Sensor monitoring test 2 failed on input P2
14	☎	Sensor monitoring test 1 failed on input P1
15	☎	Setup not possible
22	☎	Initialisation process not possible on motor: too much friction
24	☎	Motor malfunctions
25	☎	control board faulty

Reset

Executes reset procedure.

6 ADVANCED MENU

PASSWORD

To access the advanced menu, insert the 4-digit password (default 0000).

1 OPERATION PARAMETERS

1.1 Closing speed

Sets door speed for closing.
Standard value: level 3.
Adjusting range: from 1 to 10

1.2 Opening speed

Sets door speed for opening.
Standard value: level 10 (maximum speed)
Adjusting range: from 1 to 10

1.3 Deceleration width

Sets the deceleration width of the door during opening and closing.
Standard value for opening and closing : 0 cm
Adjustment: from 0 to 120 cm

1.4 Slow down speed

Speed
Sets speed level during deceleration.
Standard value: low
Adjusting range: high / medium / low

2 IN/OUT SETUP

2.1 Emerg 1

2.2 Emerg 2

Sets the effect of the emergency commands (Emerg1 and Emerg2 inputs on control board).
Standard setting EMERG 1: Stop/No memory/NO
Standard setting EMERG 2: Open/Speed: Standard/No memory/ NO

Open
Activating this command opens the door.

Close
Activating this command closes the door.

Stop
Activating this command stops the door.

the EMERG1 command has priority over EMERG2

Speed: Standard
The door opens or closes (according to setting) at normal speed.

Speed: No Standard
The door opens or closes (according to setting) at slow speed.

No memory
In order to keep the emergency active, the command must be maintained active (on release, the door returns to normal operation).

With Memory
A pulse keeps the emergency operational;
To restore operation, resetting is necessary either from the control oard or from SD-Keeper.

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No
Normally open input.

Nc
Normally closed input.

2.3 Photocells

WARNING:
TO SET PARAMETERS OF MENU 2.3 PHOTOCELLS, USE THE DISPLAY ONLY. DO NOT SET PARAMETERS FROM SD-KEEPER .

2.4 Sensors

Sets the status of "external radar" and "internal radar" commands (E-Det and I-Det inputs on control board).

No
Normally open input.

Nc
Normally closed input.

2.5 Key

Sets the status of the "key" command (Key input on the control board).

No
Normally open input.

Nc
Normally closed input.

2.6 Out 1

Sets function or status associated with individual outputs on the control board.
Standard setting OUT 1: Gong/NO

The outputs OUT2 and OUT3 Not available in the automated system

Function/Status
The output is activated according to selection:

SELECTION	OUTPUT ACTIVATION
OPEN	Until the door is open
MOVING	Until door is moving
NOT CLOSED	Until door is not closed
ALARM	Until the door is in alarm status
GONG	Intervention of photocells activates the output for 1 sec. at 0.5 sec. intervals until release.
LIGHT	In "night" operational function, when the door is commanded to open, the output is activated for 60 sec.
INTERLOCK(*)	The output is activated to create an interlock between the doors

(*) The "interlock" function cannot be selected but is automatically set on the OUT1 output when the interlock is activated (see Various/Interlock).

No
Normally open output.

Nc
Normally closed output.

3 VARIOUS

3.1 Stand Setup

Used for checking if any non-standard programming operation was effected.

Standard
If no function was modified with respect to the standard programming, an asterisk is shown.
If the asterisk is not present, press the "OK" key and all standard programming functions are reset.

No Standard
If at least one function was modified with respect to the standard programming, an asterisk is shown.

3.2 Interlock

The interlock function makes it possible to control two sliding doors (master and slave) so that opening of one depends on closing of the other and vice versa.

Off
Interlock function not active.

On
Activates the interlock function.

Master
The master door (usually the internal one).

Slave
The slave door.

No Memory
With interlock operation, you must wait for one door to re-close before commanding the other to open: any opening pulses sent during the operating cycle of the first door, have no effect.

With Memory
With interlock operation, there is no need to wait for one door to re-close before commanding the other to open: any opening pulses sent during the operating cycle of the first door are memorised, and the second door opens automatically as soon as the first door closes.

3.3 Elastic kit

The elastic kit is a mechanical accessory that, after installation, enables the anti-panic opening of the leaves in the event of a power cut.

Off
Elastic kit not installed.

On
Elastic kit installed.

Standard - No Standard
When power is supplied again after a power cut, the door automatically executes the necessary movement to reset the device.
Exception: door set in manual mode.

Important!: during the automatic reset of the system, thenti-crushing function is disabled.

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4 CHANGE PASSWORD

Sets the new password for accessing the advanced menu (4 digits).

7 CLOCK

Sets the current day, time and date.

8 TIMER

Off

Timer not activated.

On

Timer activated: the operating time bands set in "9 Timer Programming" are enabled.
When the timer is activated, a "T" appears at the side of the time shown on the display and the SD-Keeper will not allow any operational selection.
The battery inside the SD-Keeper maintains the clock in operation even if power is not supplied; if correct time is lost (e.g. black-out and discharged battery), a flashing asterisk appears in place of the "T" and the timer is disabled.

9 TIMER PROGRAMMING

With the timer, you can create up to 5 different time bands for each day of the week (by setting the band starting time) and assign an operational function to each time band.
When the SD-Keeper's internal clock reaches the starting time of a band, the associated operating function is automatically set, and the door remains in this condition until the subsequent band intervenes.
Permanent connection of the SD-Keeper+Display is necessary for correct management of time bands.

Selecting the day

Selects the day of the week to create time bands.
If you select "All days", any time bands defined subsequently are included in all days of the week.

Function

Sets the operating function to be associated with the time band by referring to the following table:

FUN	MEANING
0	NO FUNCTION
1	AUTOMATIC TWO-WAY TOTAL
2	AUTOMATIC ONE WAY TOTAL
3	AUTOMATIC TWO-WAY PARTIAL
4	AUTOMATIC ONE WAY PARTIAL
5	DOOR TOTALLY OPEN
6	DOOR PARTIALLY OPEN
7	MANUAL
8	NIGHT

Time band starting time

Sets the activation time for the time band.
There is no need for the time bands to be in chronological order.

TIMER PROGRAMMING EXAMPLE-

We wish to program a door operating at the following times:

- from MONDAY to FRIDAY:
  - from 8 a.m. in AUTOMATIC TWO-WAY TOTAL
  - from 6 p.m. in AUTOMATIC ONE WAY TOTAL
  - from 7 p.m. in NIGHT
- SATURDAY and SUNDAY: NIGHT for the whole day

Proceed as follows:
select ALL DAYS and set the following:
TIME BAND 1 : FUN. 1 8 a.m.
TIME BAND 2 : FUN. 2 6 p.m.
TIME BAND 3 : FUN. 8 7 p.m.
TIME BAND 4 : FUN. 0
TIME BAND 5 : FUN. 0
select SAT and set the following:
TIME BAND 1 : FUN. 0
TIME BAND 2 : FUN. 0
TIME BAND 3 : FUN. 0
TIME BAND 4 : FUN. 0
TIME BAND 5 : FUN. 0
select SUN and set the following:
TIME BAND 1 : FUN. 0
TIME BAND 2 : FUN. 0
TIME BAND 3 : FUN. 0
TIME BAND 4 : FUN. 0
TIME BAND 5 : FUN. 0

WARNING:
For the interlock configuration with sensors or keys adhere to the EN16005 standard using monitored sensors or using the LOW ENERGY mode.

Interlock with internal sensors

This application is recommended when the distance between the two doors is sufficient to avoid interference in the detection ranges of the two internal sensors.

- Make the connections between the J6 terminal boards of the two control boards and the sensors as shown in figure 66.
- Program the following functions::
  - "interlock" active on both doors,
  - select the "master" option for the internal door, and the "slave" option for the external one,
  - select, for both doors, option "interlock with no memory" or "interlock with memory" (refer to explanations in the programming flow-charts).

Important:

- The sensors must be connected ONLY to the E-DET input of the equipment;
- The interlock will operate only if both doors are set to the ONE WAY operating function.

Operation

These are the interlock operational stages:

1. The person on the outside activates sensor S1 of door A;
2. Door A opens;
3. The person enters the internal space between the two doors;
4. Door A closes after the pause time elapses;
5. The person activates sensor S3 of door B (If the "Interlock with memory" option was selected, there is no need to wait for the first door to close totally in order to activate the sensor of the second door);
6. Door B opens;
7. The person exits;
8. Door B closes after the pause time elapses.

The operation is identical if the person comes from the opposite direction.

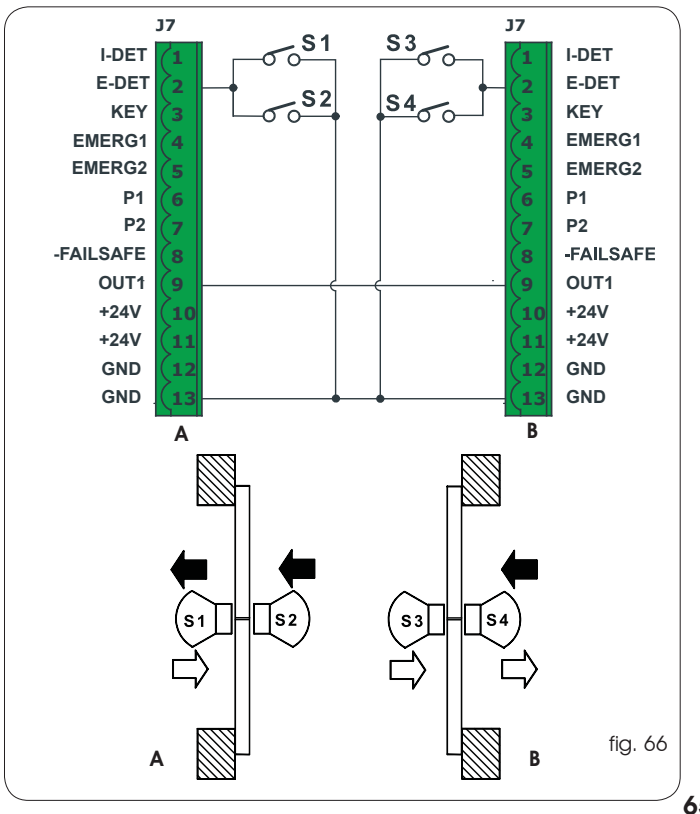

fig. 66

Interlock with push-buttons

This application is recommended if the doors are so near to one another that the two internal sensors cannot be used; two push-buttons are provided for activating the doors from the outside.

- Make the connections between the J6 terminal boards of the two control boards, of the push-buttons and additional electronic components as shown in figure 67.
- Program the following functions:
  - "interlock" active on both doors,,
  - select the "master" option for the internal door, and the "slave" option for the external one,
  - select the "interlock with memory" option for both doors (refer to explanations in the programming flow-charts).

Important:

- The push-buttons must be connected ONLY to the E-DET input of the equipment;
- The interlock will operate only if both doors are set to the ONE WAY operating function.

Operation

These are the interlock operational stages:

1. The person on the outside activates push-button P1 of door A;
2. Door A opens;
3. The person enters the internal space between the two doors;
4. Door A closes after the pause time elapses;
5. Door B opens automatically;
6. The person exits;
7. Door B closes after the pause time elapses.

The operation is identical if the person comes from the opposite direction.

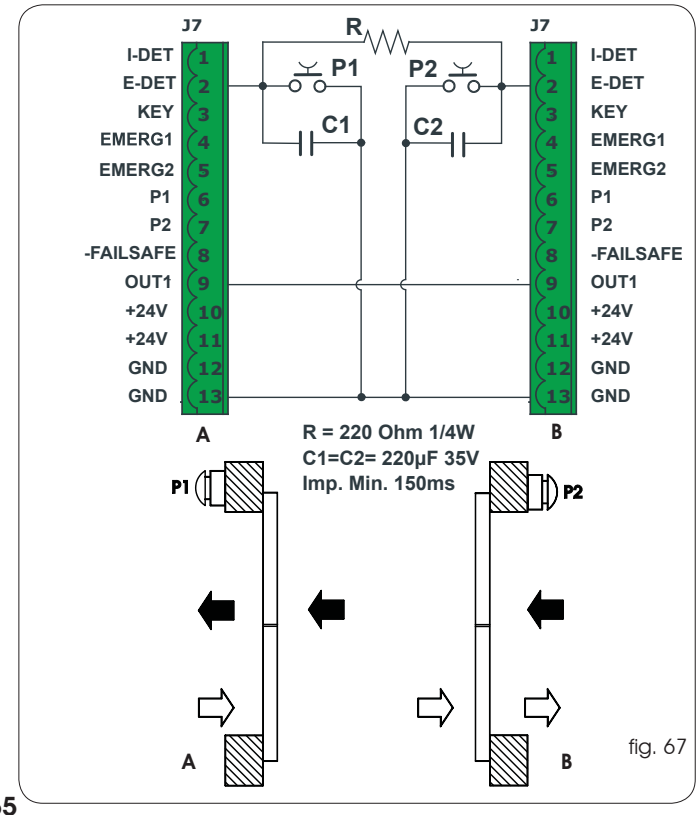

fig. 67

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ACCESSORIES

MOTOR LOCK

Motor lock installation procedure:

- cut out mains power supply;
- connect the motor lock connector to J5 of board E100;
- power up.

TO AVOID DAMAGING THE MOTOR LOCK, ALWAYS ACTIVATE OR DISABLE IT WHEN NO POWER IS SUPPLIED.

In the standard configuration:
The motor lock locks the leaves only in "Night" operating function;
- if operating on batteries in the Night mode, if the batteries discharge, the motor lock continues to lock the leaves.
With SD-Keeper+Display or E100, you can change the operation of the motor lock.

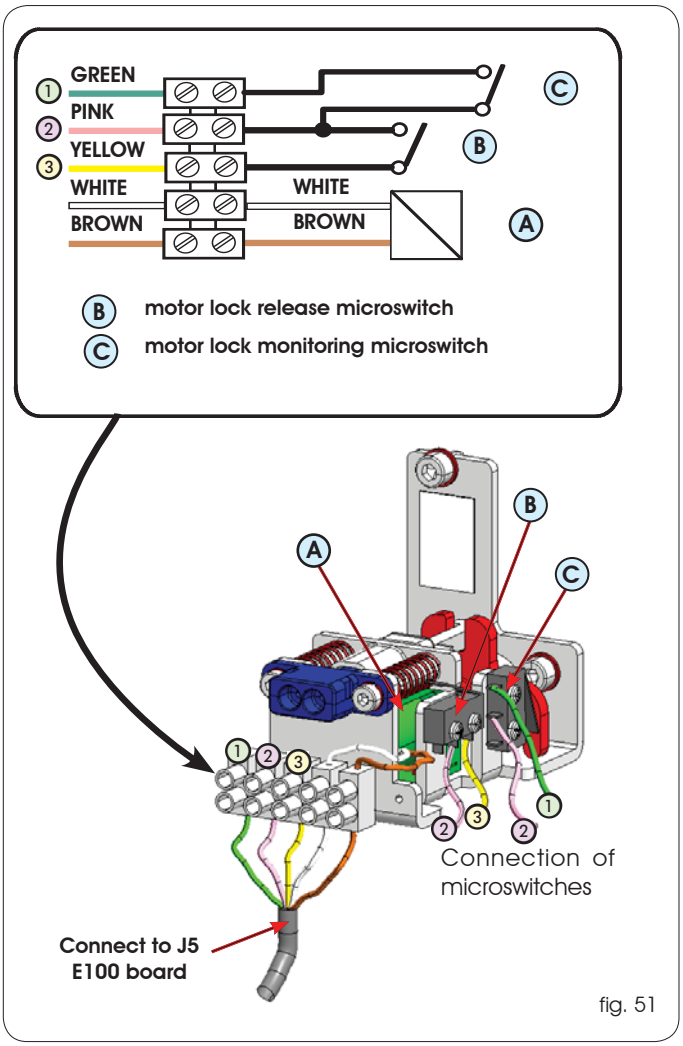

fig. 51

MOTOR LOCK SUPERVISION

This accessory (Fig. 51 ref. C) makes it possible to verify correct operation of the motor lock and, if it stays locked while open, signals an error via the control board or SD-Keeper.
To activate motor lock surveillance, the function must be set with the control board or SD-Keeper.

ANTI-PANIC BY BREAK-OUT

This accessory enables the leaves to be opened by pressure; to install it, refer to the specific instructions.
If installing the anti-panic by break-out facility, a sensor or photocell must be connected to the EMERG1 input (via SD-Keeper+Display) configured for commanding immediate stop of the movement (STOP).

BATTERY KIT

Instructions to connect and install the battery kit:

- cut out mains power supply;
- insert the connector of the battery pack in connector J16 of board E100;
- power up the mains supply again;
- using SD-Keeper+Display, activate the "Battery Kit" and set the operating parameters you require (refer to the dedicated section in this manual);

IMPORTANT: TO AVOID DAMAGING THE BATTERY BOARD, THE BATTERY BOARD MUST ALWAYS BE ACTIVATED AND DISABLED WHILE NO MAINS POWER IS SUPPLIED

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ACCESSORIES

MOTOR LOCK

Motor lock installation procedure:

- cut out mains power supply;
- connect the motor lock connector to J5 of board E140;
- power up.

⚠ ***TO AVOID DAMAGING THE MOTOR LOCK, ALWAYS ACTIVATE OR DISABLE IT WHEN NO POWER IS SUPPLIED.***

In the standard configuration:
The motor lock locks the leaves only in "Night" operating function;
- if operating on batteries in the Night mode, if the batteries discharge, the motor lock continues to lock the leaves.
With SD-Keeper+Display or E140, you can change the operation of the motor lock.

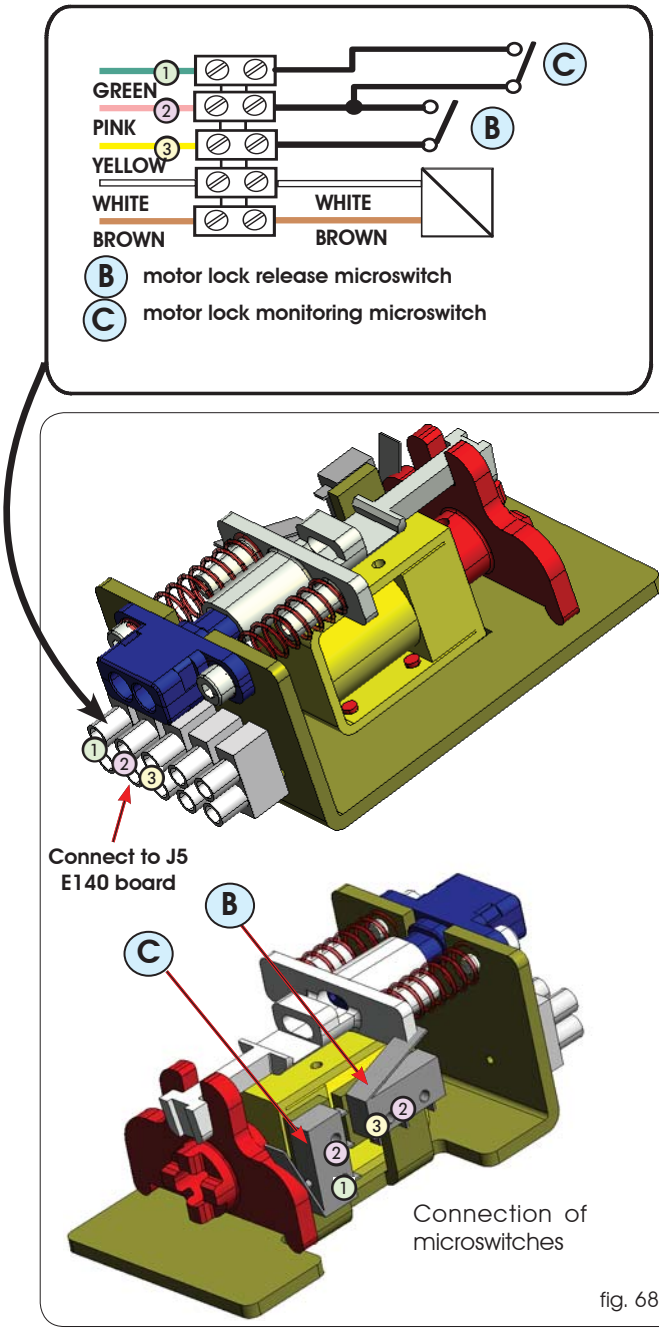

fig. 68

ANTI-PANIC BY BREAK-OUT

This accessory enables the leaves to be opened by pressure; to install it, refer to the specific instructions.
If installing the anti-panic by break-out facility, a sensor or photocell must be connected to the EMERG1 input (via SD-Keeper+Display) configured for commanding immediate stop of the movement (STOP).

BATTERY KIT

Instructions to connect the battery kit:

- cut out mains power supply;
- insert the connector of the battery pack in connector J16 of board E140;
- power up the mains supply again;
- using SD-Keeper+Display, activate the "Battery Kit" and set the operating parameters you require (refer to the dedicated section in this manual);

⚠ ***IMPORTANT: TO AVOID DAMAGING THE BATTERY BOARD, THE BATTERY BOARD MUST ALWAYS BE ACTIVATED AND DISABLED WHILE NO MAINS POWER IS SUPPLIED***

MOTOR LOCK SUPERVISION

This accessory (Fig. 68 ref. C) makes it possible to verify correct operation of the motor lock and, if it stays locked while open, signals an error via the control board or SD-Keeper.
To activate motor lock surveillance, the function must be set with the control board or SD-Keeper.

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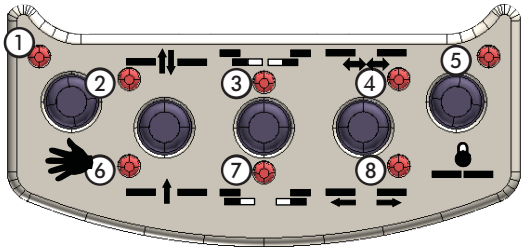
DIAGNOSTICS GUIDE

The following is a list of the specified alarms plus the relevant explanation/solution.
SD-Keeper+Display shows the alarm number and description on the Diagnostics menu.
Only the SD-Keeper shows the type of alarm by a combination of flashing LEDs (referring to the figure on the side).



DESCRIPTION	CAUSE	NOTES	ACTIONS	LED
ENERGY SAV.	The control board is operating in battery powered low consumption mode	In this mode, SD-Keeper's back-lighting is OFF and menus cannot be scrolled on the display.	(see battery kit instructions) However, the push-buttons for changing the operating functions are active.	2
2 BAT. OPERATION	control board operating on battery		In the event of a power cut, this is the normal battery-powered operation signal However, if mains power is available, check: •is the 5x20 T2,5A fuse of the transformer in the power supply unit interrupted? •is the F2 5x20 T2,5A fuse on the control board interrupted? •Is the 230V~ mains power supply correctly connected? •Is connector J1 fitted correctly on the control board? If the alarm persists, replace the control board. If the alarm persists, replace the transformer.	3
3 FORCED OPEN	Someone is now trying to force the door.	This signal is generated only if STANDARD ANTI-INTRUDER is set.		3 7
4 FLAT-BATTERY	The battery is discharged: emergency movement is not guaranteed at changeover from mains-powered to battery-powered mode.		If the alarm goes on for more than one hour, check the following: •connections to battery •are the batteries efficient? If the alarm persists, replace the battery card. If the alarm persists, replace the batteries.	4
6 EMERG 2 ON	Emergency input 2 active.	This signal is shown whenever the EMERG2 emergency contact is active. If the WITH MEMORY function was selected for this input, the signal continues even when the contact is no longer active.	If the WITH MEMORY function was selected for the EMERG2 input, when the contact is restored, RESET is necessary to cancel the signal.	3 4
7 EMERG 1 ON	Emergency input 1 active.	This signal is shown whenever the EMERG1 emergency contact is active. If the WITH MEMORY function was selected for this input, the signal continues even when the contact is no longer active.	If the WITH MEMORY function was selected for the EMERG1 input, when the contact is restored, RESET is necessary to cancel the signal.	3 4 7
8 OBST. IN OPEN.	An obstacle was detected 3 consecutive times during the opening movement.	This signal is shown only if the following function was selected: OBSTACLE DETECTION - -> OPENING: NO STANDARD	Remove the obstacle and execute RESET to restore operation.	8
9 OBST. IN CLOS.	An obstacle was detected 3 consecutive times during the closing movement.	This signal is shown only if the following function was selected: OBSTACLE DETECTION - -> CLOSING: NO STANDARD	Remove the obstacle and execute RESET to restore operation.	7 8
10	The motor lock is locked in closed position.	This signal is shown only if the motor lock was installed: •without surveillance: the door attempts to release the motor lock 3 times and then stops in a state from which it can exit only by a RESET or by turning the emergency release knob. •with surveillance: the door stops immediately in a state from which it can exit only by a RESET or by turning the emergency release knob	Check the following: •are the motor lock connections good? •is the motor lock operating correctly? •is the motor lock surveillance kit (if any) correctly fitted and connected? If the alarm continues even after RESET, replace the motor lock card and/or the lock.	3 8
11	motor lock not closing	This signal is shown only if a SURVEILLANCE KIT was installed ON THE motor lock, and was programmed.	Check the following: •is the motor lock card inserted correctly? •are the motor lock connections good? •is the motor lock operating correctly? •is the motor lock surveillance kit correctly fitted and connected?	3 7 8
12	Incorrect power supplied to motor.		Check the following: •is connector J1 correctly fitted on control board?	4 8

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13	Sensor monitoring test 2 failed on input P2	This signal is generated only if the sensor monitoring function is active.	Check the following: •sensor 2 connections •is sensor 2 in good condition and efficient?	4 7 8
14	Sensor monitoring test 1 failed on input P1	This signal is generated only if the sensor monitoring function is active.	Check the following: •sensor 1 connections •is sensor 1 in good condition and efficient?	3 4 8
15	SETUP execution is impeded in some way.	When the trouble fault is removed, SETUP starts automatically	Check the following: •the set operating function is not MANUAL, NIGHT. •operation is not battery-powered •photocells are not engaged •no emergency input is active •motor power supply absent	3 4 7 8
22	The SETUP procedure cannot be completed because excessive friction or excessive leaf weight was detected.	When this signal is generated, the display on the control board shows relative error number and the door is locked.	•cut power or set the MANUAL operating function, and then manually check if the leaves are moving correctly. •check weight of leaves	2 3 4
23	Accessory power supply +24V= dc faulty	When this signal is generated, the display of the board shows the current error and the door is locked	Check the following: •the connections and the presence of short circuits	2 3 4 7
24	A motor fault was detected during operation.	When this signal is generated, the display on the control board shows relative error number and the door is locked.	Check the following: •is connector J3 fitted correctly? •is the motor efficient? If the alarm persists, replace the control board. If the alarm persists, replace the motor.	2 8
25	control board failure		Replace the control board	2 7 8
All the LEDs of the operating functions are flashing.	No communication between SD-Keeper and control board.		Check the following: •connection length must not exceed 50 m •each connection cable must have a minimum diameter of 0.5mm2 If the alarm persists, replace the SD-Keeper. If the alarm persists, replace the control board.	

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TROUBLESHOOTING

The following will help you identify and solve some particular states.

	STATE	SUGGESTION
A	SD-KEEPER off	•no mains power supplied and the control board is battery-powered in NIGHT operating function, and in energy saving statues. •connection to the control board is interrupted: check the connection cables and wiring between SD-Keeper and the control board •control board not operating correctly; replace the control board
B	All leds off	•is the 5x20 T2,5A fuse inside the power supply unit interrupted? •Is connector J1 fitted correctly on the control board? •check connection to the power supply unit • control board not operating correctly; replace the control board
C	POWER led OFF; 24V= led ON	•mains power not supplied and the control board is battery-powered •if mains power is being supplied, see point B
D	door NOT CLOSING and ERROR LED off	•photocell/s engaged •make sure that the selected operating function is not DOOR OPEN (if no SD-Keeper is installed, make sure that input 8 of the J6 terminal board is not jumper connected to the negative) •make sure that the selected operating function is not MANUAL •check motor connection •check if power is being supplied to the motor (VMOT LED ON)
E	door NOT OPENING and ERROR LED off	•make sure that the selected operating function is not MANUAL •make sure that the selected operating function is not NIGHT (if no SD-Keeper is installed, make sure that input 7 of the J6 terminal board is not jumper connected to the negative) •check motor connection •make sure that the motor lock is not locked •check if power is being supplied to the motor (VMOT LED ON)
F	door CLOSES instead of OPENING and vice versa	•reverse the position of dip-switch 4 on the control board and execute a SETUP
G	door moving for short distances only	•check if encoder connector J17 is correctly inserted •check condition of the encoder •check the condition of the encoder connection flat cable
H	door movements very slow	•using the SD-Keeper+Display, check if the selected speed levels are as required •using the SD-Keeper+Display, check if the selected deceleration distances are as required
I	the door accelerates and decelerates suddenly during an acceleration phase in opening and / or closing.	• change to display the values OF, CF and tF . • Reduce the value Ar to 0