Last version of this manual
IP2063EN • 2023-03-23

Ditec VALOR HH-HS

Technical manual

Sliding doors automation for hospitals and heavy sliding doors

(Translation of the original instructions)

Contents

Key

This symbol indicates instructions or notes regarding safety, to which special attention must be paid.

This symbol indicates useful information for the correct functioning of the product.

General safety precautions

ATTENTION! Important safety instructions.
Please follow these instructions carefully. Failure to observe
the information given in this manual may lead to
severe personal injury or damage to the equipment.
Keep these instructions for future reference.
This manual and those for any accessories can be
downloaded from www.ditecautomations.com

This installation manual is intended for qualified personnel only •Installation, electrical connections and adjustments must be performed by qualified personnel, in accordance with Good Working Methods and in compliance with the current regulations • Read the instructions carefully before installing the product. Wrong installation could be dangerous • Before installing the product, make sure it is in perfect condition.

The packaging materials (plastic, polystyrene, etc.) should not be discarded in the environment or left within reach of children, as they are a potential source of danger • Do not install the product in explosive areas and atmospheres: the presence of inflammable gas or fumes represents a serious safety hazard • Make sure that the temperature range indicated in the technical specifications is compatible with the installation site • Before installing the motorization device, make sure that the existing structure, as well as all the support and guide elements, are up to standards in terms of strength and stability. Verify the stability and smooth mobility of the guided part, and make sure that no risks of fall or derailment subsist. Make all the necessary structural modifications to create safety clearance and to guard or isolate all the crushing, shearing, trapping and general hazardous areas • The motorization device manufacturer is not responsible for failure to observe Good Working Methods when building the frames to be motorized, or for any deformation during use • The safety devices (photocells, safety edges, emergency stops, etc.) must be installed taking into account the applicable laws and directives, Good Working Methods, installation premises, system operating logic and the forces developed by the motorized door or gate • The safety devices must protect against crushing, cutting, trapping and general danger areas of the motorized door or gate. Display the signs required by law to identify hazardous areas. Each installation must bear a visible indication of the data identifying the motorized door or gate • Before connecting the power supply, make sure the plate data correspond to those of the mains power supply. An omnipolar disconnection switch with a contact opening distance of at least 3 mm must be fitted on the mains supply. Check that there is an adequate residual current circuit breaker and a suitable overcurrent cutout upstream of the electrical installation in accordance with Good Working Methods and with the laws in force • When requested, connect the motorized door or gate to an effective earthing system that complies with the current safety standards • Before commissioning the installation to the end user, make sure that the automation is adequately adjusted in order to satisfy all the functional and safety requirements, and that all the command, safety, and manual release devices operate correctly.

During installation, maintenance and repair operations, cut off the power supply before opening the cover to access the electrical parts • The protection cover of the operator must be removed by qualified personnel only.

The electronic parts must be handled using earthed antistatic conductive arms. The manufacturer of the motorization declines all responsibility if component parts not compatible with safe and correct operation are fitted • Only use original spare parts for repairing or replacing products • The installer must supply all information concerning the automatic, manual and emergency operation of the motorized door or gate, and must provide the user with the operation and safety instructions.

EC Declaration of Incorporation

We:
ASSA ABLOY Entrance Systems AB
Lodjursgatan 10
SE-261 44 Landskrona
Sweden

Declare under our sole responsibility that the type of equipment with name:

Ditec VALORHH, Ditec VALORHS Sliding door operator

Comply with the following directives and their amendments:

2006/42/EC	Machinery Directive (MD) for the following essential health and safety requirements: 1.1.2, 1.1.3, 1.2.1, 1.2.2, 1.2.3, 1.2.4.2, 1.2.6, 1.3.9, 1.4.3, 1.7.2, 1.7.3, 1.7.4, 1.7.4.1, 1.7.4.2.
2014/30/EU	Electromagnetic Compatibility Directive (EMCD)
2011/65/EU	Restriction of hazardous substances (RoHS 2)
2015/863/EU	Restriction of hazardous substances (RoHS 2 Amendment)

Harmonized European standards that have been applied:

EN 61000-6-3:2007 + A1:2011 EN 61000-6-2:2005 + EC:2005 + IS1:2005
EN 16005:2012/AC:2015
EN 60335-1:2002 + A11:2014 + A1:2004+ A12:2006 + A1/EC:2017 + A13:2008 + EC:2009 + EC:2010 + A14:2010
EN ISO 13849-1:2008 + AC:2009 EN ISO 13849-2:2008
EN 55014-1:2006

Other standards or technical specifications that have been applied:

EN 62233:2008

The manufacturing process ensures the compliance of the equipment with the technical file.

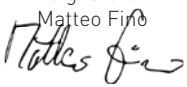
The equipment must not be used until the final installed automatic entrance system has been declared in compliance with the Machinery Directive 2006/42/EC.

Responsible for technical file:

Matteo Fino
BSP Ind channel & Gate Automation
Ditec S.p.A.
Largo U. Boccioni, 1
21040 Origgio (VA)
Italy

Signed for and on behalf of ASSA ABLOY Entrance Systems AB by:

Place	Date	Signature	Position
Origgio	2023-03-23	Matteo Fino	Head of Ind channel & Gate Automation



1. Technical details

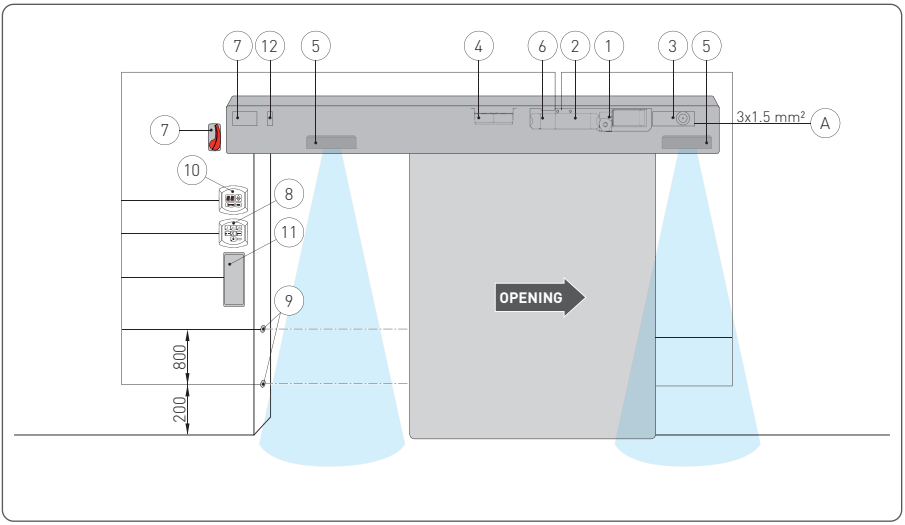
	VALORHH	VALORHS
Power supply	230 V~ , -10%/ +10%, 50/60 Hz	
Absorption	1 A	1 A
Power supply for accessories	24 V ⎓ 0,5 A 24 V ⎓ 0,8 A	
Maximum speed 1 wing	0.5 m/s	0.5 m/s
Maximum speed 2 wings	1.0 m/s	1.0 m/s
Service class	4 - INTENSE 5 - VERY INTENSE	4 - INTENSE 5 - VERY INTENSE 6 - CONTINUOUS
Intermittence	class 4: S3=30% class 5: S3=60%	class 4: S3=30% class 5: S3=60% class 6: S3 = 100%
Maximum load 1 wing	class 4: 200 kg class 5: 160 kg	class 4: 200 kg class 5: 170 kg
Maximum load 2 wings	class 4: 200 kg class 5: 160 kg	class 4: 340 kg class 5: 300 kg
Maximum load 1 wing (2 wheels carriage)	/	class 5: 300 kg class 6: 220 kg
Maximum load 2 wings (2 wheels carriage)	/	class 5: 360 kg class 6: 300 kg
Maximum load 1 wing (3 carriages)	/	class 4: 450 kg class 5: 350 kg
Maximum load 2 wings (3 carriages)	/	class 4: 500 kg class 5: 400 kg
Temperature	min +2 °C max +55 °C	min -20 °C max +55 °C
Temperature with batteries	min +2 °C max +50 °C	min -10 °C max +50 °C
Degree of protection	FOR INTERNAL USE ONLY	FOR INTERNAL USE ONLY
Control panel	EL32	EL32

1.1 Machinery Directive

According to the Machinery Directive (2006/42/EC), the installer who motorises a door or gate has the same obligations as the manufacturer of a machine, and as such must:

- prepare the technical documentation, which must contain the documents indicated in Annex V of the Machinery Directive;
  (the technical documentation must be kept and made available to the competent national authority for at least ten years, starting from the date of construction of the motorised door);
- draw up the EC statement of conformity according to Annex II-A of the Machinery Directive and hand it over to the customer;
- affix the EC marking to the motorised door in accordance with point 1.7.3 of Annex I of the Machinery Directive.
- ensure compliance of the motorised door or gate with safety regulations, by installing the necessary safety devices;

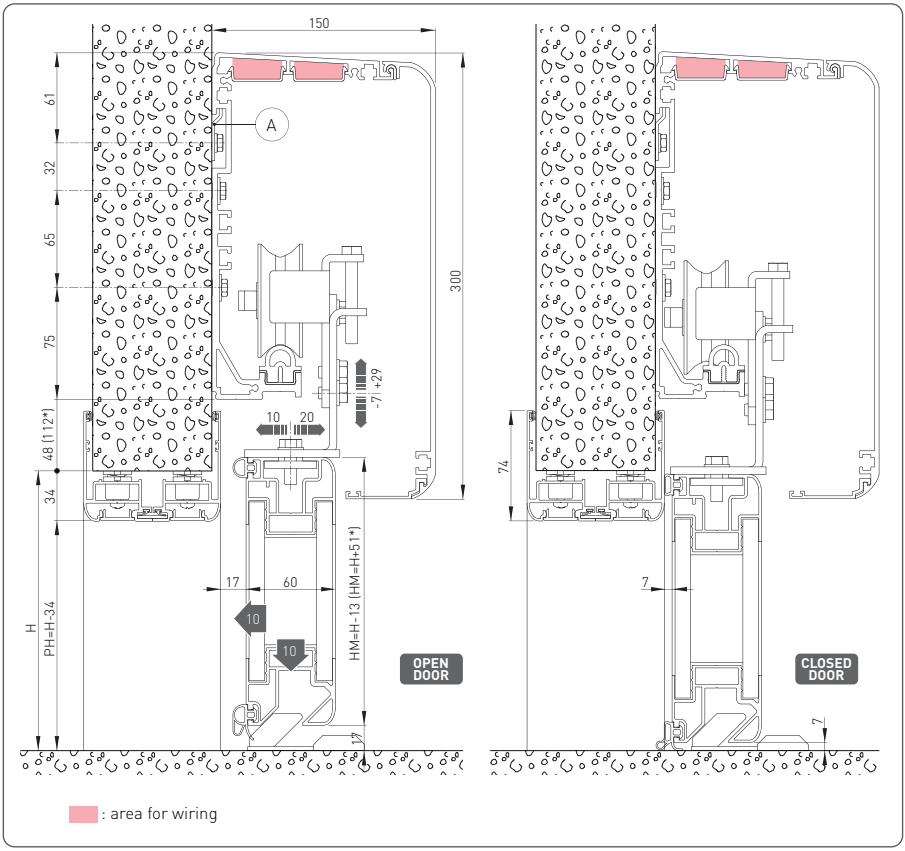
4. Standard installation



Ref.	Code	Description
1		Control and drive unit
2	EL32	Control panel
3	AL3	Power supply
4	VALHABC VALHABE	Continuous mode battery kit Emergency battery kit
5	PAS000AP PAS005APIH	External safety sensor Safety sensor built into automation
6	MP1	Accessory and supplementary functions connection module
7	VALHSLOK LOKSBM	Lock device (VALORHS only) Release handle
8	COME COMH COMK	Function selector switch
9	CELPR	Photocells
10	MD1+MDA	Display module for diagnostics and advanced controls
11	PFP1 PFP2	Open button
12	VALHHFM	Magnetic door closed limit switch
A		Connect the power supply to an approved omnipolar switch with an opening distance of the contacts of at least 3 mm (not supplied). The connection to the mains must be made via an independent channel, separated from the connections to command and safety devices.

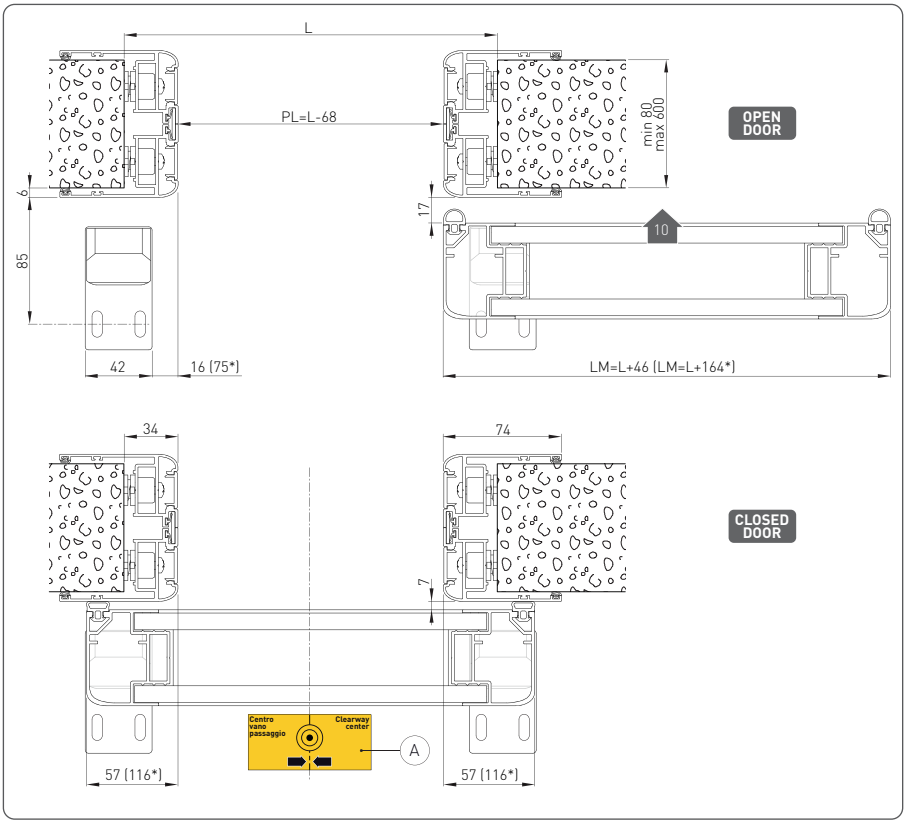
NOTE: the given operating and performance features can only be guaranteed with the use of DITEC accessories and safety devices.

5. VALORHH box fastening



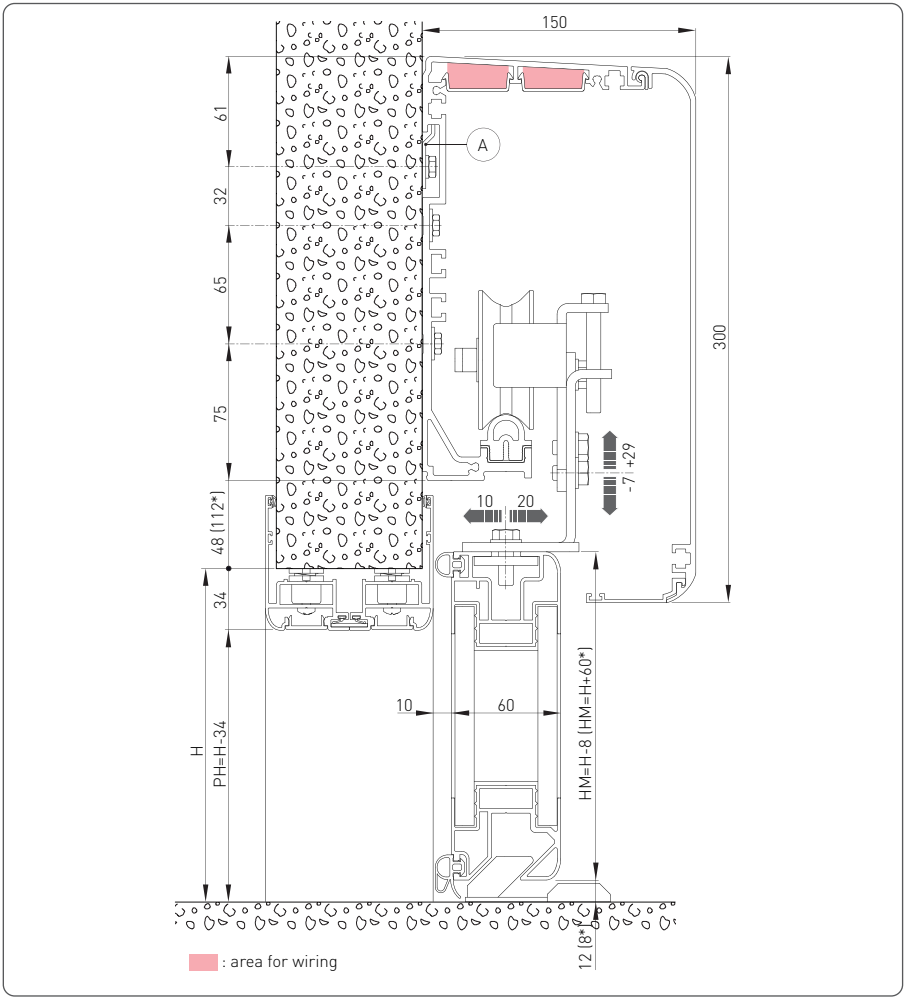
All of the measurements shown are expressed in millimetres (mm) unless otherwise indicated.
With the VALORHH automation units, when the door is at the completely closed position, it drops 10 mm and draws closer to the counter frame by 10 mm, causing the compression of the gaskets and thereby obtaining a hermetic seal.
In the figure there are the measurement units for wall installation of the VALORHH automation units, considering that the doors have been made of DITEC profiles series PAMH60.
If the PAMH60 door wing has lead-shielding (e.g. radiology department) refer to the measurements marked [*].
Attach the box with M6Ø12 steel plug or else with 6MA screws. Distribute the attachment points at about every 800 mm.
To make installation easier, supplied mounting brackets [A] can be used.
Verify that the back of the box is perpendicular to the floor and not deformed in a longitudinal sense with respect to the form of the wall. If the wall were to be not perfectly straight and smooth it is necessary to arrange the attachment of metal plates to which the box will then be attached.

WARNING: the box must be securely fixed to the wall using a fastening that is suitable for the weight of the door wings.



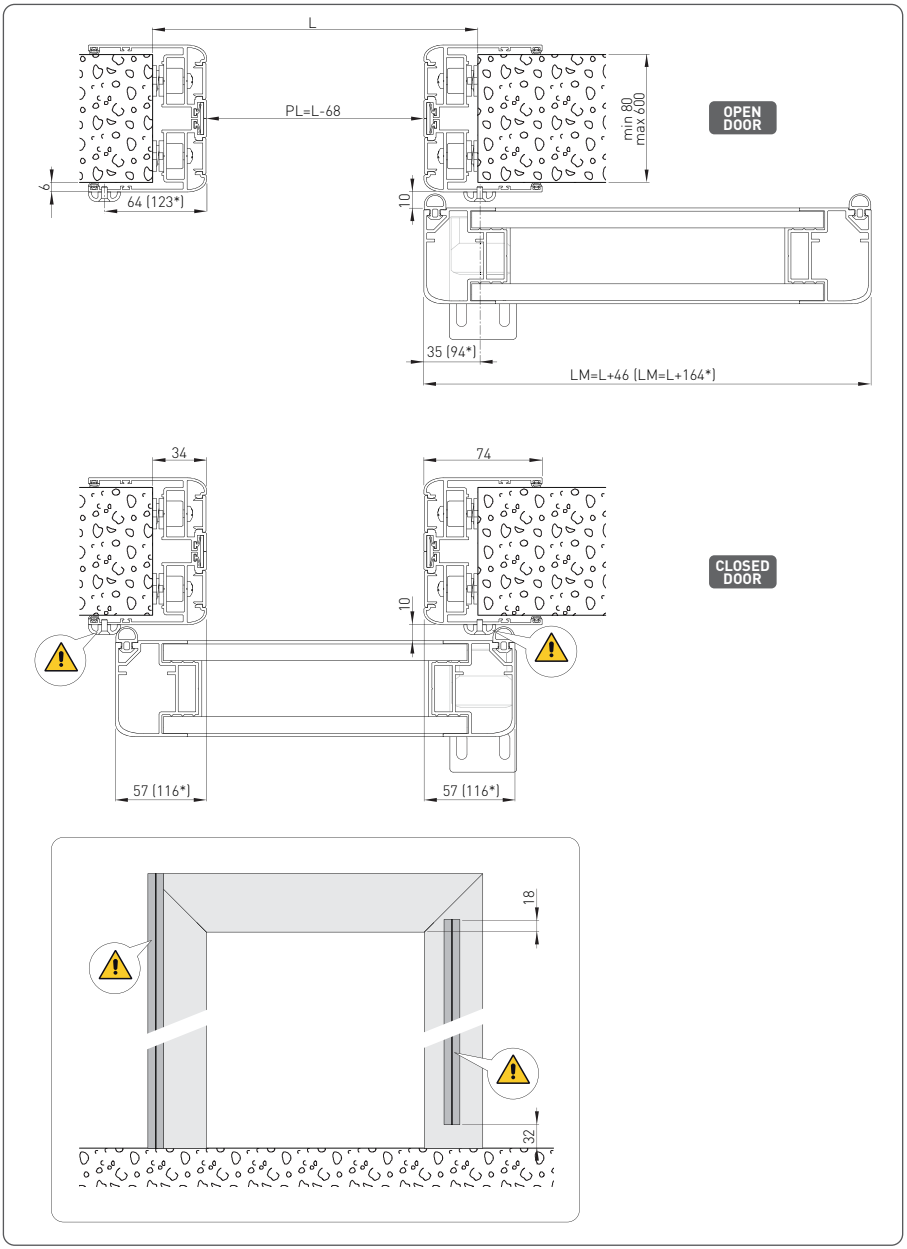
WARNING: fasten the automation to the wall so that the label [A] on the box coincides with the centre of the doorway.

4. VALORHS box fastening



All of the measurements shown are expressed in millimetres (mm) unless otherwise indicated. In the figure there are the measurement units for wall installation of the VALORHS automation units, considering that the doors have been made of DITEC profiles series PAMH60.
If the PAMH60 door wing has lead-shielding (e.g. radiology department) refer to the measurements marked [*]. Attach the box with M6Ø12 steel plug or else with 6MA screws. Distribute the attachment points at about every 800 mm. To make installation easier, supplied mounting brackets [A] can be used. Verify that the back of the box is perpendicular to the floor and not deformed in a longitudinal sense with respect to the form of the wall. If the wall were to be not perfectly straight and smooth it is necessary to arrange the attachment of metal plates to which the box will then be attached.

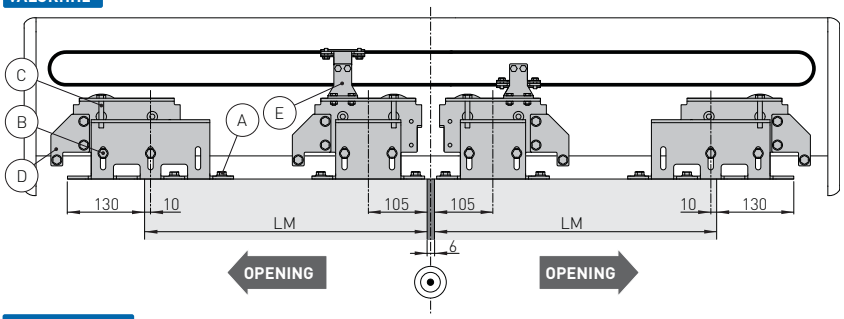
WARNING: the box must be securely fixed to the wall using a fastening that is suitable for the weight of the door wings.



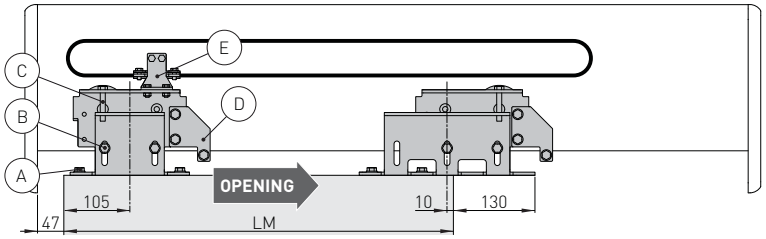
NOTE: the figure refers to doors that open to the right. For doors that open to the left, the position of the door stop profiles must be reversed.

5. VALORHH door wing installation and adjustment

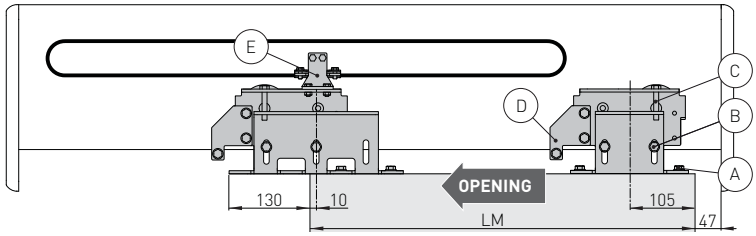
VALORHH2



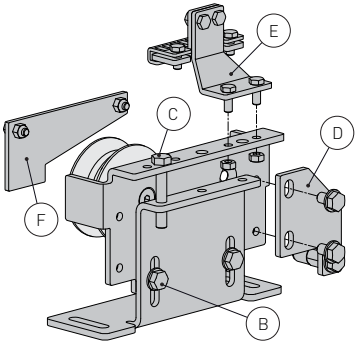
VALORHH1DX



VALORHH1SX

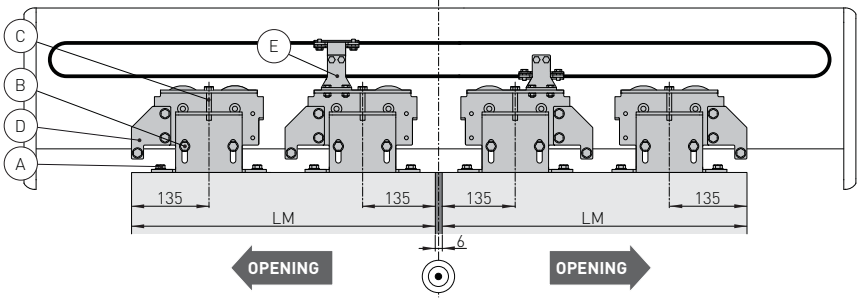


- Fix the carriages to the door wing using the screws [A] complying with the measurements shown in figure VALORHH2 for double-door wing automations, VALORHH1DX for single-door automations with opening to the right and VALORHH1SX for single-door automations with opening to the left.
- Fit the pre-assembled door wing to the automation.
- Assemble the anti-derailing bracket [D] as indicated and adjust it so that it does not rub against the box. With the door wing closed, adjust the bracket [F] on the box so that the door wing cannot be lifted.
- Loosen screws [B], adjust the vertical position of the door wing using the screw [C] and fix the adjustment using screws [B];
- Move the door wing manually to check that it moves freely without friction.
- Check that the door wing is correctly lowered when fully closed and pushes against the counter frame.
- Fix the belt connecting bracket [E] to the carriage.

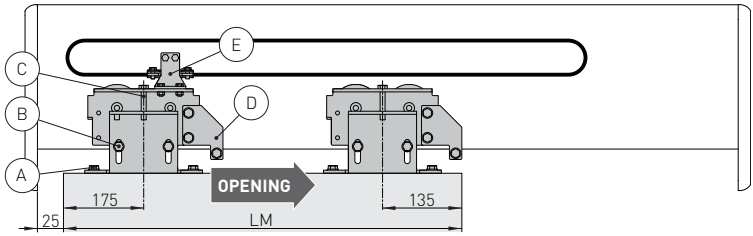


6. VALORHS door wing installation and adjustment

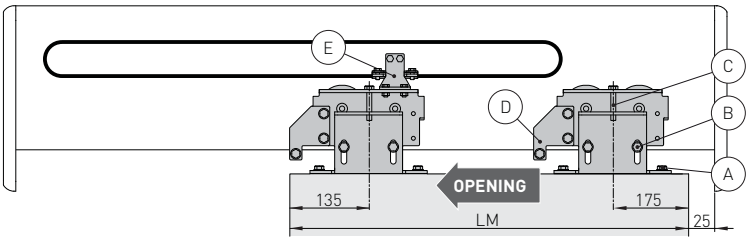
VALORHS2



VALORHS1DX

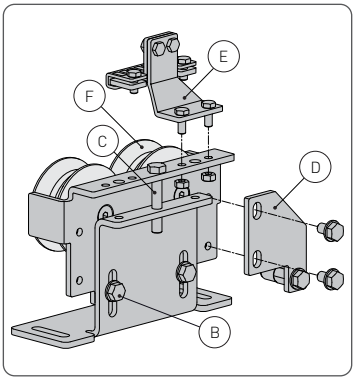


VALORHS1SX

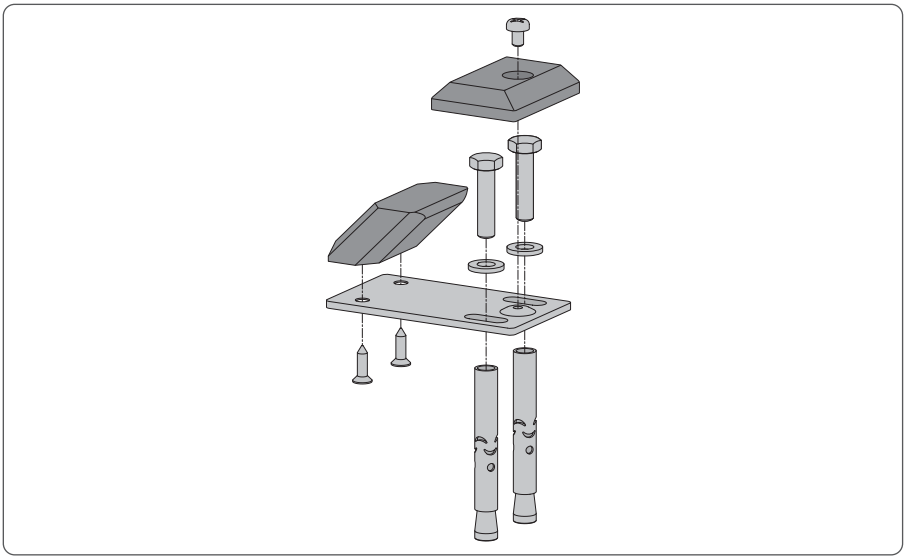


NOTE: if a second wheel [F] (KVALHS2RC kit) is added to increase the load bearing capacity of the automation, the adjustment screw [C] must be moved into a central position.

- Fix the carriages to the door wing using the screws [A] complying with the measurements shown in figure VALORHS2 for double-door wing automations, VALORHS1DX for single-door automations with opening to the right and VALORHS1SX for single-door automations with opening to the left.
- Fit the pre-assembled door wing to the automation.
- Assemble the anti-derailing bracket [D] as indicated and adjust it so that it does not rub against the anti-derailing bracket and the box.
- Loosen screws [B], adjust the vertical position of the door wing using screw [C] and fix the adjustment using screws [B].
- Move the door manually to check that it moves freely without friction.
- Fix the belt connecting bracket [E] to the carriage.



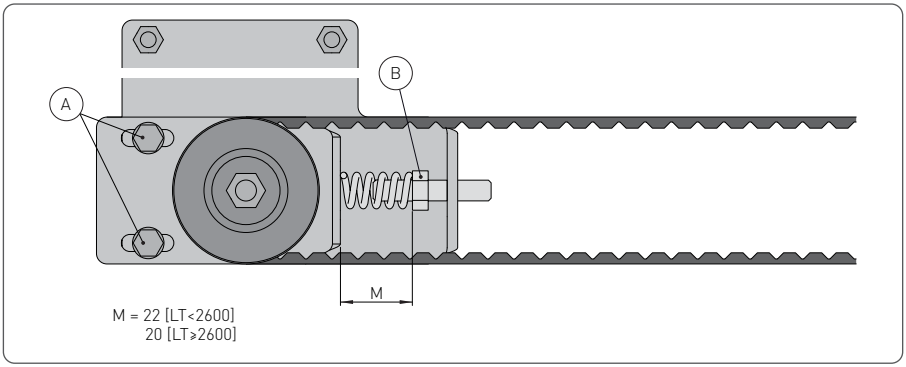
7. Floor guide installation



Install the floor guide for the PAMH60 door wing by complying with the measurements to the chapter 3 [VALORHH], or to the chapter 4 [VALORHS].

NOTE: with VALORHH automation units it is necessary to install 2 floor guides.

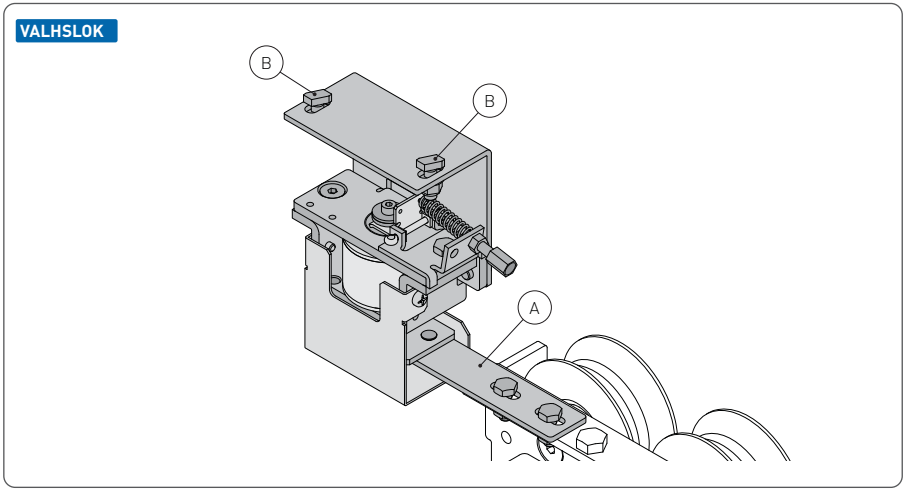
8. Belt adjustment



Loosen the screws [A], unscrew screw [B] until the spring compresses to 22 mm (if the length of the automation is less than 2600 mm) or 20 mm (if the length of the automation is more than 2600 mm). Lock the adjustment by tightening screws [A].

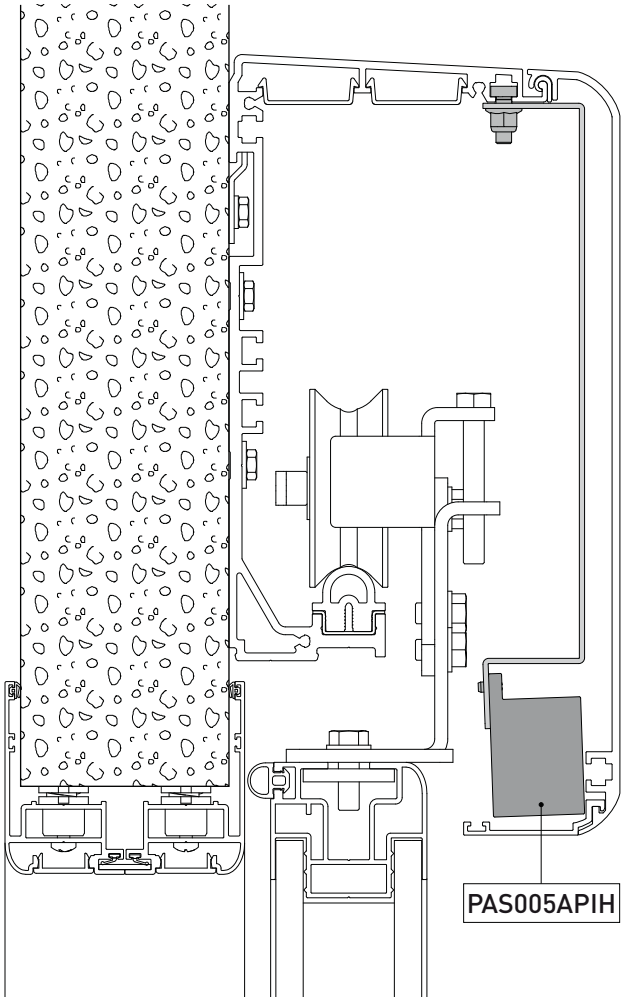
WARNING: an incorrect adjustment prejudices the correct operation of the automation unit.

9. Lock device installation



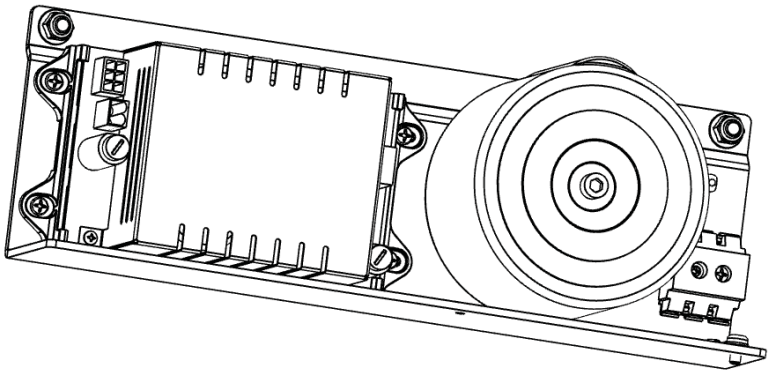
- Fix the lock hook bracket [A] to the carriage.
- Bring the door wings to a closed position.
- Fasten the VALHSLOK locking device (only on VALORHS automations) to the box profile using the screws [B] provided.
- Align the locking pin and the lock hook bracket [A] and manually check that it operates correctly.
- Lightly lubricate the locking pin and the lock hook bracket [A].

10. Installation of the integrated safety sensor



11. Connection of power supply

AL3



Before connecting the power supply, make sure the plate data correspond to that of the mains power supply.

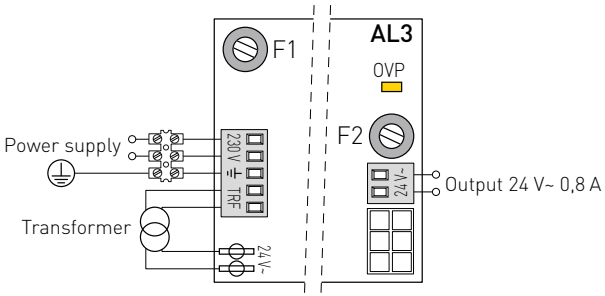
An omnipolar disconnection switch with minimum contact gaps of 3 mm must be included in the mains supply.

Check that upstream of the electrical installation there is an adequate residual current circuit breaker and a suitable overcurrent cutout.

Use a H05RN-F 3G1,5 or H05RR-F 3G1,5.

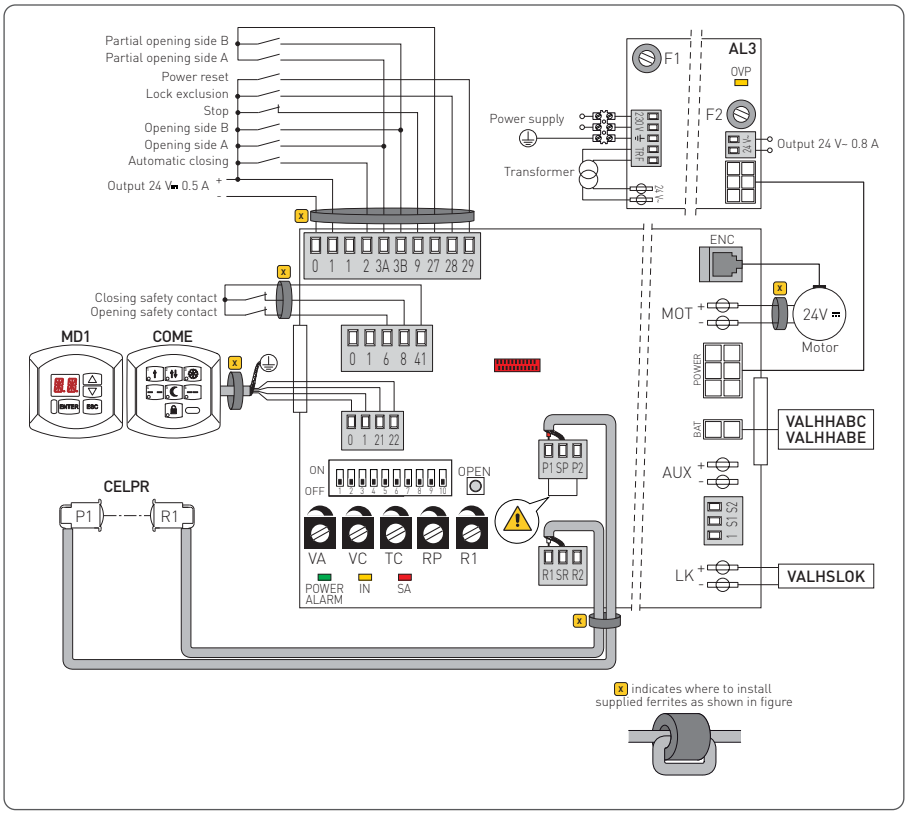
Make sure there are no sharp edges that may damage the power supply cable.

Make sure that the mains power supply (230 V) conductors and the accessory power supply (24 V) conductors are separate.



F1= 1,6A
F2= 1A

12. Electrical connections

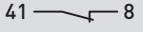


13. Commands

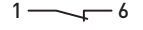
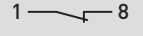
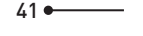
Command		Function	Description
1 — 2	N.O.	AUTOMATIC CLOSING	A permanent contact enables automatic closing. COMH, COMK and COME function selectors automatically select automatic closing.
1 — 3A 1 — 3B	N.O.	SIDE A OPENING SIDE B OPENING	The closing of the contact activates the opening operation.
27 — 3A 27 — 3B	N.O. N.O.	PARTIAL OPENING SIDE A PARTIAL OPENING SIDE B	The closing of the contact activates the partial opening operation.
1 — 9	N.C.	STOP	The opening of the contact stop all movements. The opening of the contact excludes all normal or emergency operations. **WARNING**: when the contact closes again the door proceeds with the interrupted operation.
1 — 28	N.O.	LOCK EXCLUSION	The lock operation is excluded when the contact is closed. The exclusion is automatic in the fully open and partial two-way positions with COMH, COMK and COME function selectors. **NOTE**: if there is no locking device and the function selector, make a jumper on terminals 1-28. **NOTE**: advanced command management is available with the MD1 display module.
1 — 29	N.O.	POWER RESET	All acquired data is deleted when the contact is closed. The automation can start acquisition again after 3 seconds
OPEN	N.O.	OPENING	The opening operation is activated with a brief press.
		SETTINGS RESET	- Press the OPEN key for 4 s (IN LED flashes); - press the OPEN key within 4 s for another 2 s (the IN LED comes on). The SETTINGS RESET deletes all the remote software settings made using COME, MD1. After SETTINGS RESET it is possible to adjust the control panel directly. **WARNING**: if the MD1 display module is disconnected from the control panel, a SETTINGS RESET must be performed.

WARNING: make a jumper for all the N.C. contacts if not in use. The terminals with the same number are equal.

13.1 Non testable safety devices

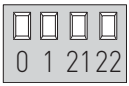
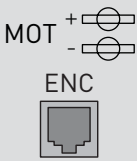
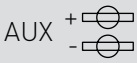
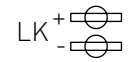
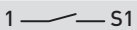
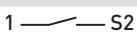
Command		Function	Description
	N.C.	OPENING SAFETY	With DIP9=ON the opening of the contact decreases the opening speed in the last 500 mm of the door wing stroke. **NOTE**: advanced command management is available with the MD1 display module.
	N.C.	REVERSAL SAFETY CONTACT	With DIP9=ON the opening of the contact reverses movement (re-opening) during the closing operation.

13.2 Testable safety devices

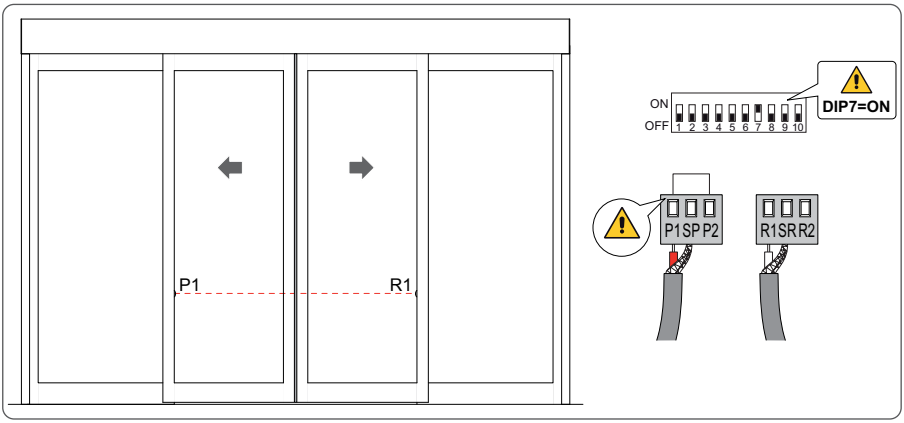
Command		Function	Description
	N.C.	OPENING SAFETY	The opening of the contact decreases the opening speed in the last 500 mm of the door wing stroke. **NOTE**: advanced command management is available with the MD1 display module.
	N.C.	REVERSAL SAFETY CONTACT	The opening of the contact reverses movement (re-opening) during the closing operation.
		SAFETY TEST	With DIP9=ON connect terminal 41 of the control panel to the corresponding test terminal on the safety device. Terminal 41 activates a test of the safety device on each cycle. If the test fails the SA led flashes and the test is repeated.

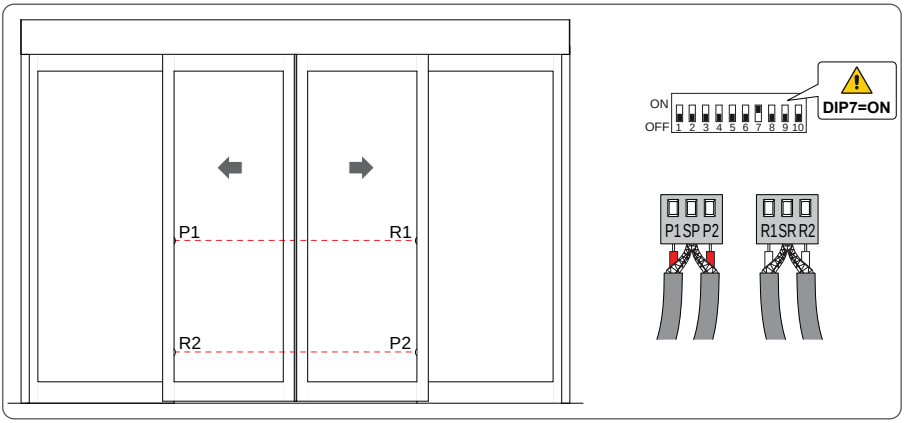
14. Outputs and accessories

AL3

Output	Value - Accessories	Description
	24 V⎓ - 0,5 A	Accessories power supply. Power supply output for external accessories. **NOTE**: the maximum absorption of 0.5 A corresponds to the sum of all terminals 1.
	24 V~ 0,8 A	Accessories power supply. External accessories power supply output. Output protected by fuse F2.
	COME MD1	Allows the connection of 1 or 2 COME function selectors or the MD1 display module, or the network connection of a maximum of 4 automations. **NOTE**: use a data transmission type screened cable.
		Motor-encoder connection. Connect the motor and encoder to the control panel by means of the supplied cables.
	AL3	Power supply unit connection.
	VALHHABE 2 x 12 V - 1,2 Ah	Anti-panic battery kit. With DIP3=OFF with the mains power supply off, the automation will carry out an opening operation at low speed. When the door is open, the power supply is disconnected from the control panel. To charge the batteries, connect the mains power and the battery kit at least 30 minutes before starting the system. **WARNING** : the batteries must always be connected to the control panel for charging. Periodically check the efficiency of the batteries.
	VALHHABC 2 x 12 V - 7 Ah	Continuous mode battery kit. With DIP3=ON with the mains power supply off, the battery kit will guarantee continuous operating. With DIP4 select the last operation with the batteries flat. To charge the batteries, connect the mains power and the battery kit at least 30 minutes before starting the system. **WARNING** : the batteries must always be connected to the control panel for charging. Periodically check the efficiency of the batteries.
	DO NOT USE	DO NOT USE
	VALHSLOK 24 V⎓ 1 A	Locking device power supply output.
	DO NOT USE	DO NOT USE
	DO NOT USE	DO NOT USE

14.1 CELPR photocells connection





15. Adjustments

	Description	OFF	ON
DIP1	Lock type.	Normal lock.	Do not use.
DIP2	Opening direction selection. The opening direction is intended by viewing the automation from the side being examined	Right-hand opening for single oor wing automations. Selection for double door wing automations.	Left-hand opening for single door wing automations.
DIP3	Batteries.	Anti-panic operation.	Continuous operation.
DIP4	Flat batteries.	Last operation closing.	Last operation opening.
DIP5	FUTURE USE	/	/
DIP6	Selecting automation type.	VALORHS	VALORHH
DIP7	Integrated photocell	Disabled.	Enabled.
DIP8	FUTURE USE	/	/
DIP9	Safety test terminal 41.	Disabled. With DIP9=OFF the safety sensors must be connected to terminals 1-6 and 1-8.	Enabled.
DIP10	FUTURE USE	/	/

15.1 Trimmer enabling procedure

The VA, VC and R1 trimmers affect the force limiting safety function. They must be set as instructed. If not, the modifications will not be accepted and the IN LED will flash.

- press the OPEN key for 4 s (IN LED flashes);
- wait 4 s and set the VA, VC and R1 trimmers within a maximum time of 5 min;
- to complete the procedure, press the OPEN key for 2 s or wait for the maximum time to expire.

Trimmer	Description
VA 	**Opening speed adjustment.** Adjusts the opening speed.
VC 	**Closing speed adjustment.** Adjusts the closing speed
TC 	**Setting automatic closing time.** Adjust the time that passes between the end of the opening operation and the start of the automatic closing operation.
RP 	**Partial opening adjustment.** Adjust the range when the command is given between 27-3A (3B). With the trimmer at minimum, the opening is equal to 5% of the normal opening; with the trimmer at maximum, the opening is equal to 90% of the normal opening.
R1 	**Thrust on obstacles adjustment.** The control panel is equipped with a safety device that stops motion if an obstacle is encountered during the opening operation and reverses motion during the closing operation. After the obstacle has been removed, the door automatically searches for the stop, continuing its stroke at the learning speed.

LED	On	Flashing
POWER ALARM	Power supply on.	Encoder not working or automation fault.
IN	Receipt of a command 1-3A, 1-3B, 27-3A, 27-3B.	Change in status of a dip switch or command 1-2.
		SETTINGS RESET in progress.
		Trimmer enabling procedure in progress.
SA	At least one of the safety contacts is open.	Safety test failure (terminal 41).
OVP	Activation of the control panel protection due to overvoltage. Set speeds must be reduced.	

AL3

16. Electromagnetic emissions

WARNING: in accordance with Directive 2014/30/EU the supplied ferrites must be installed as shown to chapter 12.

Pass the cable through the ferrite, make 1 turn and protect it from knocks by using heat-shrink sheathing or similar.
The ferrite must be secured to the cable near the terminal boards (approximately 50 mm).
If the number of cables involved need to use several ferrites, KEMC2 kit is available for this purpose.

17. Start-up

WARNING: Before performing any type of operation, make sure that the automation is turned off and the batteries are disconnected.
The operations in point 4 are performed without safety devices.
The trimmer can only be adjusted with the automation idle.

1. Select the correct opening direction with DIP2.
2. Set TC trimmer to the minimum and VA, VC, RP and R1 trimmers halfway.
3. Make a jumper on the safety devices (41-6 and 41-8) and the stop (1-9).
   Set DIP7=OFF.
4. Turn on the power (mains and batteries) and perform a SETTINGS RESET using the OPEN button as indicated to the chapter 5.
   WARNING: the control panel performs an automatic POWER RESET on each start and the first opening or closing manoeuvre is performed at low speed allowing the automatic self-learning of the stop positions (acquisition).
   Check that the automation is operating correctly with further opening and closing commands and set the desired speed using the VA and VC trimmers.
   WARNING: to set the VA, VC and R1 trimmers, the trimmers must be enabled as described to the chapter 15.1.
5. Adjust the thrust on obstacles with R1 trimmer.
6. Remove the jumpers and connect the safety devices (41-6 and 41-8) and the stop (1-9).
   If the CELPR photocells are present, set DIP7=ON.
7. Select battery operating using DIP3 and DIP4.
8. Adjust the automatic closing with the TC trimmer (enabled by command 1-2).
9. Set the partial opening using the RP trimmer if required.
10. Connect any accessories and check they operate correctly.
11. If the automation encounters an obstacle during a closing operation, the movement is reversed.
    If the automation encounters an obstacle during an opening operation, movement is stopped.
    If the obstacle is detected twice consecutively, it is considered as the new stop until it is removed.

NOTE: in the event of servicing or if the control panel is to be replaced, repeat the start-up procedure.

18. Troubleshooting

Problem	Possible causes	Remedy
The automation does not open or close or does not perform the set operations	Function selector fault.	Perform the SETTINGS RESET using the OPEN button as indicated tothe cahpter 13. **WARNING**: this operation may cancel previously made remote adjustments
	Function selector incorrectly set.	Check and correct the function selector settings.
L'automazione non apre o non chiude.	No power. (POWER ALARM led off).	Check that the control panel is powered correctly.
	Short circuited accessories. (POWER ALARM led off).	Disconnect all accessories from terminals 0-1 (voltage must be 24 V⎓) and reconnect one at a time.
	Blown line fuse. (POWER ALARM led off).	Replace F1 fuse.
	The stop contact is open.	Check terminal 9 of the control panel and the position of the function selector switch (if present).
	The automation is locked by bolts and locks.	Check that the door wings move freely.
	Safety contacts are open. (SA led on).	Check terminals 6 and 8 of the control panel.
	Photocells are activated. (SA led on).	Check that the photocells are clean and operating correctly.
	Incorrect DIP7 setting. (SA led on).	If DIP7= ON, check the effective connection of the CELPR photocells.
	The radars are activated.	Check that the radar is not subjected to vibrations, does not make false readings or the presence of moving objects within its range.
	The automatic closing does not work.	Check jumper 1-2 and the position of the function selector (if present).
	Incorrect DIP9 setting. (SA led flashing)	Check the connections of the safeties as illustrated to the chapter 2.
External safety devices not activating.	Incorrect connections between the photocells and the control panel.	Connect N.C. safety contacts together in series and remove any jumpers on the control panel terminal board.
The automation opens by itself.	The radars are instable or detect moving objects.	Check that the radar is not subjected to vibrations, does not make false readings or the presence of moving objects within its range.
The automation opens/ closes briefly and then stops	Encoder disconnected, false encoder contacts, encoder fault. (POWER ALARM led flashing).	Check that the encoder is connected correctly, clean the contacts by connecting and disconnecting the encoder plug on the contacts, replace encoder.
	Motor leads crossed. (POWER ALARM led flashing).	Check the motor leads.
	There is a presence of friction.	Manually check that the door wings move freely and adjust the door wing in height by lifting it.

NOTE: if the MD1 display module is present, consult the Visualization of alarms and faults chapter in the relative installation manual.

19. Routine maintenance plan

Perform the following operations and checks every 6 months according to intensity of use of the automation.

Disconnect the 230 V~ power supply and batteries:

- Clean the moving parts (the carriage guides and the floor guides).
- Check the belt tension.
- Clean sensors and photocells.
- Check the stability of the automatic system and make sure that all screws are correctly tightened.
- Check the alignment of the doors, the closing positions and the correct introduction of the blocking device.

Reconnect the 230 V~ power supply and batteries:

- Check that the blocking system is working correctly.
- Check the stability of the door and that the movement is regular and without friction.
- Check that all control functions are operating correctly.
- Check that the photocells and safety sensors are operating correctly.
- Check that the door's developed powers are in accordance with applicable regulations.

On VALORHH automation with 160-200 kg door wing:

- Replace the carriage wheels every 3 years or 100,000 cycles.
- Replace the gearmotor every 5 years or 200,000 cycles.

On VALORHS automation with 360-500 kg door wing:

- Replace the gearmotor every 5 years or 500,000 cycles.

NOTE: for spare parts, see the spares price list.

Only use original spare parts for repairing or replacing products.
The installer must supply all information concerning the automatic, manual and emergency operation of the motorised automation or gate, and must provide the user with the operating instructions.
The installer must prepare and keep a maintenance record showing all the routine and extraordinary maintenance work carried out.

The crossed-out wheeled bin symbol indicates that the product should be disposed of separately from household waste. The product should be handed in for recycling in accordance with local environmental regulations for waste disposal. By separating a marked item from household waste, you will help reduce the volume of waste sent to incinerators or landfill and minimize any potential negative impact on human health and the environment.

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