

Maintenance manual.

VERSA · Magnetic system for automatic interior doors

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01

Introduction.

This manual establishes the maintenance operations required to ensure the safety, reliability and proper operation of the VERSA magnetic system for automatic interior doors throughout its service life. This manual forms an integral part of the product and must be kept at the installation site and always be available to the personnel responsible of maintenance. The operations described in this document are intended exclusively for qualified and authorised technical personnel.

Maintenance of the automatic door must be carried out in accordance with the applicable regulations in force, in particular Directive 2006/42/EC (Machinery Directive) and EN 16005+A1:2024 – Power operated pedestrian doorsets. Safety in use, as well as national regulations concerning electrical safety and occupational health and safety.

Failure to comply with the instructions provided herein may result in hazardous situations for persons, material damage and loss of CE conformity of the installation.

During routine or extraordinary maintenance operations requiring intervention on the magnetic system, it is **mandatory to disconnect the electrical power supply** and take all necessary safety measures, including mechanically securing the moving leaf to prevent unintended movement.

The VERSA magnetic system does not require any special maintenance interventions beyond the periodic inspections, functional checks, permitted adjustments and technical cleaning described in this manual, which must be carried out at the specified intervals depending on the operating conditions and the number of cycles of the installation.

02

Product identification.

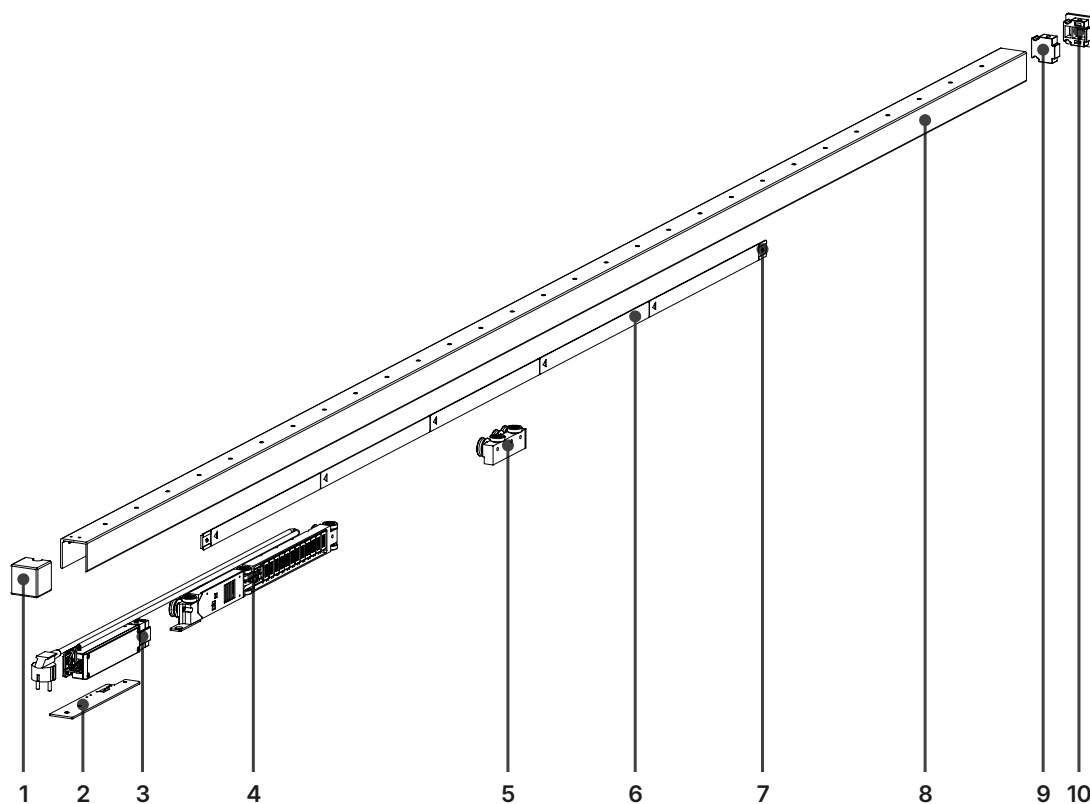
Each VERSA magnetic system is identified by means of a label stuck on the main profile of the system.

The Serial Number displayed allows to unequivocally identify the product and must be entered in the maintenance record, as well as in any technical communication, service request or intervention by the authorised technical service.

Hawa Dynamics, S.L.U. Pasaje Arrahona 4, Nave 1 08210 Barberà del Vallès Barcelona (Spain)		Modelo / Model: Versa Mini Norma / Regulation: EN16005 Nº Serie / Serial Number: 000121-XXXX Año de Fabricación / Year of Manufacture: 2026
Guía magnética para puertas automáticas de interior Magnetic operator for automatic interior doors Tensión / Voltage 110 - 230 VAC Frecuencia / Frequency 50/60 Hz Carga Máxima / Maximum Load 80 Kg Temperatura / Temperature Min. 5°C - Max. 40°C		CE  000121-XXXX

03

VERSA main components.



1 Cable Cover

2 Power Supply Cover

3 Power Supply + I/O Board (Master)

4 Drive Unit

5 Leaf Trolley

6 Magnets Array

7 Magnets Stopper

8 Aluminium Header Frame

9 End Stopper

10 Cover

04

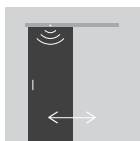
Technical data.

Overall dimensions (height x width)	45 × 46 mm
System weight	8 - 10 kg
System length	
	Single leaf: 1700 - 3000 mm
	Double leaf: 3400 - 6000 mm
Clear opening	
	Single leaf: 750 - 1050 mm
	Double leaf: 1650 - 2300 mm
Leaf weight	Min: 20 kg / Max: 80 kg
Opening speed	200 - 600 mm/s
Closing speed	150 - 300 mm/s
Noise level	< 50 dB
Power Supply	
Input voltage	110 - 240 VAC 50/60 Hz (Universal)
Output voltage	24 VDC
Cable cross-section	3 × 1,5 mm ² (Length 1,5 m)

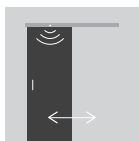
Adjustable parameters

- Operating modes
- Hold-open time
- Opening and closing speed
- Low-energy mode
- Automatic activation mode
- Bi-stable activation mode
- Opening and closing deceleration speed
- Deceleration start distance during opening
- Acceleration and deceleration profile
- Distance opening end stop
- Obstruction sensitivity during opening and closing
- Second deceleration start distance
- Opening direction
- Bluetooth pairing
- Factory reset

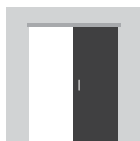
Operating modes



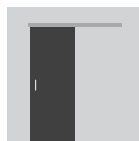
Automatic
(HE)



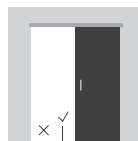
Automatic
(LE)



Open



Closed



Exit only

Consumption

Standby	< 2 W
In motion	80 W
Maximum (Peak)	150 W

Motor

Type	Linear LSMPM
Number of poles	4
Voltage	24 VDC
Magnet type	Permanent neodymium
Force	< 100 N

Temperature	Min 5 °C - Max 40 °C
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Accessories	24 VDC / 1A
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Number of cycles	> 500.000 / year
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Warnings

- Overheating
- Low temperature
- Power supply voltage out of range
- Motor feedback failure
- System overcurrent
- Excessive leaf weight
- Internal clock failure
- Internal memory failure
- Class B failure
- Safety sensor failure
- Internal test failure
- Obstruction during opening
- Obstruction during closing
- Motor stalled
- I/O communication failure
- I/O module locked
- Internal communication failure

05

General troubleshooting.

PROBLEM	SOLUTION
The sliding leaf does not move	Ensure that, with the power switched off, the door leaf can be moved manually, smoothly and without resistance. Push at the top of the leaf to confirm that it does not wobble or make contact with the floor.
	Verify that the I/O Board (Master) is switched on and that the Pairing LED (blue) is on.
	Check that the door is not in "Open" mode.
	Ensure that the activation and safety devices are properly connected and configured.
The leaf moves too slow	Ensure that, with the power switched off, the door leaf can be moved manually, smoothly and without resistance. Push at the top of the leaf to confirm that it does not wobble or make contact with the floor.
	Check if parameter 04 is set to "Low Energy".
	Verify that there is no element causing excessive friction, especially at the floor guide.
	Increase the value of parameter 02.
The self-adjustment does not complete	Ensure that, with the power switched off, the door leaf can be moved manually, smoothly and without resistance. Push at the top of the leaf to confirm that it does not wobble or make contact with the floor.
	Check that the leaf weight is below the maximum admitted value (80 kg).
	Check if the motor is fully covered by the magnets along its entire travelling distance, from the closed position to the open position.
The leaf hits users	Check that all sensors are correctly adjusted.
	Reduce value of parameter 29, to detect earlier and reduce force.
The leaf vibrates at the end of the opening movement	Reduce value of parameter 08.
The leaf slams at the end of the closing movement	Reduce value of parameter 09.

06

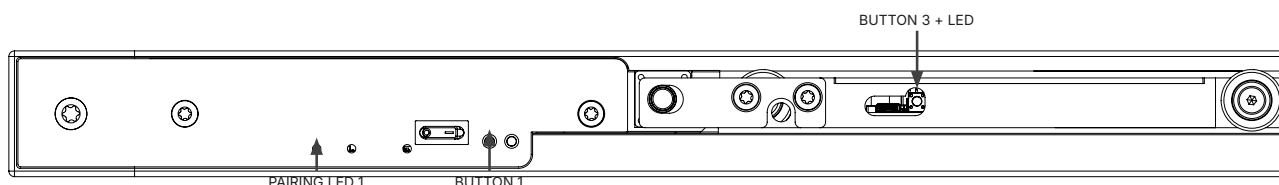
Malfunction codes and solutions.

In case of malfunction, a warning will appear in the app or on the digital selector. This code allows the fault to be identified, facilitating faster diagnosis and resolution. Refer to the following list to determine the meaning of each malfunction code and the recommended corrective actions:

ERROR 00	No error The system is operating normally. Corrective action: No action is required. The system operates normally.
ERROR 01	Overheating error The system temperature has exceeded the maximum permitted limit. Corrective action: Verify that the ambient temperature is below 40 °C. Switch the operator off and turn on again. If the error persists, contact an authorised service technician.
ERROR 02	Low-temperature error The system temperature is below the minimum permitted limit. Corrective action: Verify that the ambient temperature is above the minimum operating limit. Switch the operator off and turn on again. If the error persists, contact an authorised service technician.
ERROR 03	Overvoltage error The power supply voltage has exceeded the maximum permitted limit. Corrective action: Check the power supply voltage. Switch the operator off and turn on again. If the error persists, contact an authorised service technician.
ERROR 04	Undervoltage error The power supply voltage is below the minimum required limit. Corrective action: Check the power supply voltage and ensure that it meets the minimum requirements. Switch the operator off and turn on again. If the error persists, contact an authorised service technician.
ERROR 05	Encoder error The motor encoder signal is not being received correctly. Corrective action: Verify the presence of magnets along the entire motor travel; ensure that the end stops at both ends of the magnet assembly are firmly secured and do not move; and ensure that there are no gaps between the magnets (composed of individual 250 mm modules with 20 magnets on each module).
ERROR 06	Power stage overcurrent error Excessive current has been detected in the power stage. Corrective action: Switch the operator off and turn on again. If the error persists, contact an authorised service technician.
ERROR 07	Phase A overcurrent error Excessive current has been detected in motor phase A. Corrective action: Switch the operator off and turn on again. Check the motor wiring connections. If the error persists, contact an authorised service technician.
ERROR 08	Phase B overcurrent error Excessive current has been detected in motor phase B. Corrective action: Switch the operator off and turn on again. Check the motor wiring connections. If the error persists, contact an authorised service technician.
ERROR 09	Phase C overcurrent error Excessive current has been detected in motor phase C. Corrective action: Switch the operator off and turn on again. Check the motor wiring connections. If the error persists, contact an authorised service technician.
ERROR 11	Weight error The detected weight of the door leaf exceeds the maximum admitted limit. Corrective action: Check that the door leaf weighs less than 80 kg; verify that friction at the floor guide is not excessive; check that the leaf is completely vertical (without inclination) and properly balanced; and ensure that the leaf slides smoothly along its entire travelling distance.

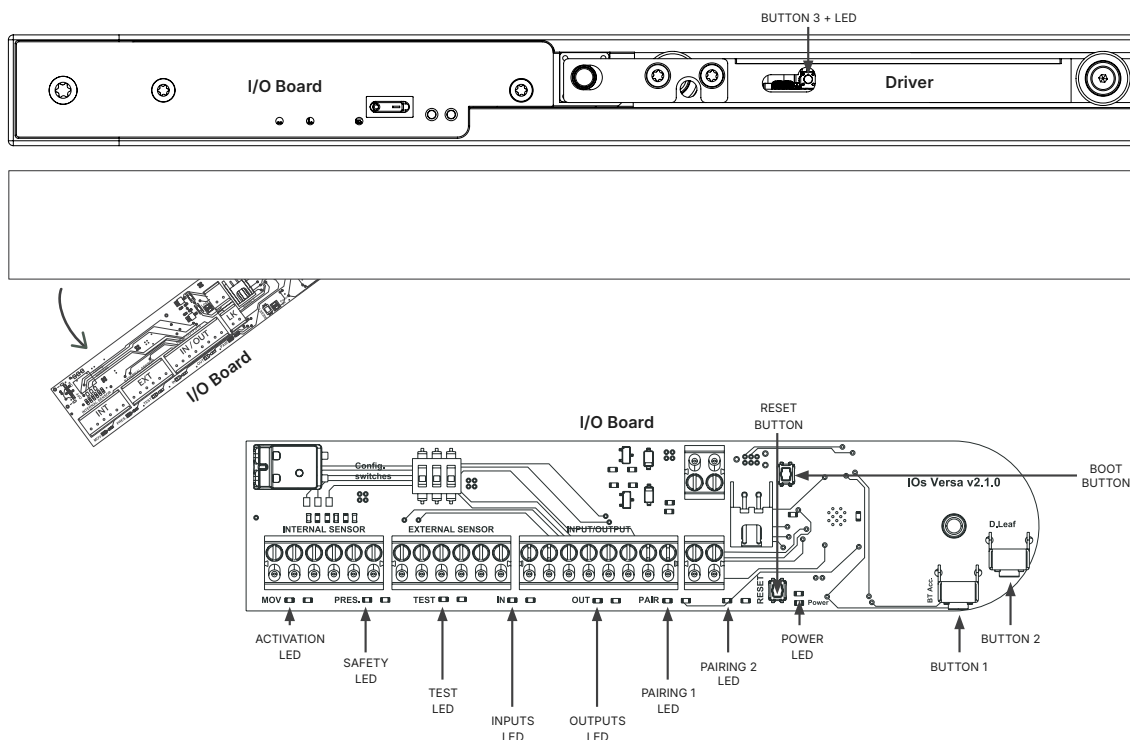
06 · Malfunction codes and solutions (continued)

ERROR 12	Oscillator error The internal clock oscillator is malfunctioning. Corrective action: Switch the operator off and turn on again. If the error persists, contact an authorised service technician.
ERROR 13	EEPROM error Read/write failure in the internal non-volatile memory. Corrective action: Switch the operator off and turn on again. If the error persists, contact an authorised service technician.
ERROR 14	Class B error A failure has been detected in the safety self-diagnostic system. Corrective action: Switch the operator off and turn on again. If the error persists, contact an authorised service technician.
ERROR 15	Safety sensor test failure One or more safety sensors are not responding correctly. Corrective action: Repair the defective sensor or check its connections and configuration. If everything is correct, switch the operator off (OFF position) and then switch it on again (ON position). If the error persists, contact an authorised service technician.
ERROR 16	Test error An internal system test has failed. Corrective action: Switch the operator off and turn on again. If the error persists, contact an authorised service technician.
ERROR 17	Obstruction detected during the opening cycle An obstruction has been detected while the door was opening. Corrective action: Remove any obstruction from the door opening path. Check that the safety sensors are not generating false detections. If the error persists, contact an authorised service technician.
ERROR 18	Obstruction detected during the closing cycle An obstruction has been detected while the door was closing. Corrective action: Remove any obstruction from the door closing path. Check that the safety sensors are not generating false detections. If the error persists, contact an authorised service technician.
ERROR 19	Stall error The motor has stalled and cannot continue moving. Corrective action: Check that the door leaf slides smoothly along its entire travelling distance. Verify that friction is not excessive and that no physical obstruction is blocking the movement. If the error persists, contact an authorised service technician.
ERROR 20	I/O connection error Communication with the I/O Board has been lost. Corrective action: Check the connection between the app and the I/O Board. Ensure that Bluetooth is enabled and that the device is within the coverage range. Try connecting again.
ERROR 21	I/O module locked Communication with the I/O Board has been locked. The module has not received the expected communication frame. Corrective action: Check the connection between the app and the I/O Board. If the error persists, contact an authorised service technician.
ERROR 22	Internal communication error Bluetooth communication between motor driver and I/O Board has been lost. Corrective action: Check that the pairing LED 1 on the I/O Board is lit and displaying a blue color. If not, pair the motor driver and the I/O Board again as described below. If the error persists, contact an authorised service technician. 1 Press BUTTON 3 (in motor driver) until the BUTTON 3 LED starts blinking. 2 Press BUTTON 1 (in I/O Board) until PAIRING LED 1 starts blinking. When PAIRING LED 1 remains steadily lit, the devices have been paired.



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Description of the I/O Board and driver, and LED indicators.



LEDS	ACTIVATION	ON when activated, OFF when not activated.
	SAFETY	ON when activated, OFF when not activated.
	TEST	ON when activated, OFF when not activated.
	INPUTS	ON when activated, OFF when not activated.
	OUTPUTS	ON when activated, OFF when not activated.
	PAIRING 1	BLINKING during the pairing process. ON when paired. OFF when not paired.
	PAIRING 2	BLINKING during the pairing process. ON when paired. OFF when not paired.
	POWER	ON when the system is powered.
	BUTTON 3	BLINKING in pairing mode, OFF when not activated.
BUTTONS	BUTTON 1	Used to pair driver 1 and the I/O Board.
	BUTTON 2	Used to pair driver 2 and the I/O Board.
	BUTTON 3	Used to pair driver and the I/O Board.
	RESET BUTTON	Used to perform a reset.
SERIES OF COMBINATIONS	PAIR REMOTE CONTROL WITH MOTOR	Press button 1 five times consecutively and then press any button on the remote control to pair the remote control with the motor.
	PERFORM SELF-ADJUSTMENT	Press button 2 five times consecutively to run self-adjustment on all paired motors.
	RESET PASSWORD	Press button 1 three times consecutively and then button 2 three times consecutively to reset the password in order to access the door from the app.

08

Maintenance operations.

To ensure the safety and proper operation of the VERSA magnetic system for automatic interior doors, periodic maintenance must be carried out. Maintenance includes cleaning, visual and functional inspections, and technical adjustments. Maintenance operations may involve risks if they are not carried out correctly. Therefore:

- ! Interventions must only be carried out by authorised personnel, according to the level of responsibility indicated in the following table.
- ! Before any operation, the power supply to the automatic door must be disconnected.
- ! The moving leaf must be mechanically secured to prevent unintended movement.
- ! Hazardous areas associated with the movement of the leaf, mechanical elements and electrical components exist.
- ! Residual risks may exist that cannot be completely eliminated.
- ! The appropriate personal protective equipment (PPE) must be used for the intervention.

The tasks assigned to the user are limited to basic cleaning, visual inspection and simple checks, without the use of tools or access to internal components. If the user detects any anomaly during a visual inspection (for example, loose screws, loose leaf suspension, or visible wear on the automatic lock), they must contact a qualified technician so that the corresponding adjustment or repair can be carried out. The user must not perform adjustments, tightening or any mechanical intervention on any component.

Any component replacement must be carried out using original spare parts or parts authorised by the manufacturer. After replacing any component that affects safety or leaf movement, a complete verification of the operation and safety devices must be carried out.

The maintenance tasks and intervals that must be performed on the VERSA magnetic system are described below, depending on frequency or number of cycles:

TASK	FREQUENCY	NUMBER OF CYCLES	RESPONSIBLE
Cleaning of the top and bottom rails	Annual	200.000	User
Cleaning of the sliding leaf travel area	Annual	200.000	User
Visual inspection of the sliding leaf suspension	Annual	200.000	User
Visual inspection of external screws	Annual	200.000	User
Visual inspection of the automatic lock (if installed)	Annual	200.000	User
Visual inspection of activation sensors	Annual	200.000	User
Visual inspection of safety sensors	Annual	200.000	User
Check remote-control battery condition	Every 2 years	-	User
Inspection of motor brushes and power supply board	Annual	250.000	Technician
Inspection of leaf trolleys	Annual	250.000	Technician
Inspection of felt pads on end stops	Every 5 years	500.000	Technician
Inspection of the floor guide	Every 5 years	500.000	Technician

The indicated maintenance frequency is a guideline and must be adjusted according to the actual operating conditions of the installation. In intensive-use environments, high-traffic areas or unfavorable environmental conditions, it is recommended to increase the frequency of maintenance interventions.

09

Maintenance record.

This record allows the maintenance and inspection operations performed on the VERSA magnetic system for automatic interior doors to be documented, ensuring traceability, proper operation and compliance with the applicable safety regulations.

Date:
Performed by:
Compliant:
YES
NO

Comments:

Maintenance technician's signature:

Customer's signature:

Date:
Performed by:
Compliant:
YES
NO

Comments:

Maintenance technician's signature:

Customer's signature:

Date:
Performed by:
Compliant:
YES
NO

Comments:

Maintenance technician's signature:

Customer's signature:

Date:
Performed by:
Compliant:
YES
NO

Comments:

Maintenance technician's signature:

Customer's signature:



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