



ONDA 624

Motoriduttore 24V per cancello scorrevole Gearmotor 24V for sliding gate Motoréducteur pour portail coulissant Getriebemotor 24V für Schiebetor Motorreductor 24V para cancela corredera

SCOPO DEL MANUALE

Questo manuale è stato redatto dal costruttore ed è parte integrante del prodotto. In esso sono contenute tutte le informazioni necessarie per: • la corretta sensibilizzazione degli installatori alle problematiche della sicurezza;

la corretta installazione del dispositivo;

la conoscenza approfondita del suo funzionamento e dei suoi limiti;

il corretto uso in condizioni di sicurezza:

Il corretto uso in condizioni di sicurezza;
 La costante osservanza delle indicazioni fornite in questo manuale, garantisce la sicurezza dell'uomo, l'economia di esercizio e una più lunga durata di funzionamento del prodotto.
 Al fine di evitare manovre errate con il rischio di incidenti, è importante leggere attentamente questo manuale, rispettando scrupolosamente le informazioni fornite.
 Le istruzioni, i disegni, le fotografie e la documentazione contenuti nel presente manuale sono di proprietà APRIMATIC S. p.a. e no poscono eserce rispettati in alcune modo noi interrate nel poscio di proprietà

APRIMATIC S.p.a. e non possono essere riprodotti in alcun modo, né integralmente, né parzialmente. Il logo "APRIMATIC" è un marchio registrato di APRIMATIC S.p.a.

PURPOSE OF THE MANUAL

This manual was drawn up by the manufacturer and is an integral part of the product. It contains all the necessary information: • to draw the attention of the installers to safety related problems • to install the device properly

to understand how it works and its limits

 to use the device under safe conditions Strict observance of the instructions in this manual guarantees safe conditions as well as efficient operation and

a long life for the product. To prevent operations that may result in accidents, read this manual and strictly obey the instructions provided. manufacturer and may not be reproduced by any means. The "Aprimatic" logo is a trademark registered by Aprimatic S.p.A.

BUT DU MANUEL

Ce manuel a été rédigé par le constructeur et fait partie intégrante du produit.

Il contient toutes les informations nécessaires pou

- Il contient toutes les informations necessaires pour : sensibiliser les installateurs aux problemes liés à la sécurité ; installer le dispositif de manière correcte ; connaître le fonctionnement et les limites du dispositif ; utiliser correctement le dispositif dans des conditions de sécurité optimales ; Le respect des indications fournies dans ce manuel garantit la sécurité personnelle, une économie de fonctionnement contrainement de des conditions de sécurité personnelle, une économie de fonctionnement et une longue durée de vie du produit. Afin d'éviter des opérations incorrectes et de ne pas risquer des accidents sérieux. lire attentivement ce manuel et

respecter scrupuleusement les informations fournies.

respecter souppresentant les informations sournes. Les instructions, les dessins, les photos et la documentation contenus dans ce manuel sont la propriété d'APRIMATIC S.p.A. et ne peuvent être reproduits sous aucune forme, ni intégralement, ni partiellement. Le logo « Aprimatic » est une marque déposée par Aprimatic S.p.A.

 ZWECK DES HANDBUCHS

 Dieses Handbuch wurde vom Hersteller verfasst und ist ein ergänzender Bestandteil des Produkts.

 Es enthält alle nötigen Informationen für:

 • die Sensibilisierung der Monteure für Fragen der Sicherheit;

 • die vorschriftsmäßige Installation der Vorrichtung;

 • die vorschriftsmäßige unstallation der Vorrichtung;

 • die vorschriftsmäßige und sichere Benutzung;

 • die vorschriftsmäßige und sichere Benutzung;

 • Beachtung der in diesem Handbuch enthaltenen Anweisungen gewährleistet die Sicherheit der Personen, den wirtschaftlichen Betrieb und eine lange Lebensdauer des Produkts.

 Zur Vermeidung von Fehlbedienung und somit Unfallgefahr dieses Handbuch aufmerksam durchlesen und die Anweisungen genau befolgen.

Anweisungen genau befolgen. Anweisungen genau belogen. Die Anleitungen, Zeichnungen, Fotos und Dokumentationen in diesem Handbuch sind Eigentum von APRIMATIC S.p.A. und dürfen in keiner Weise ganz oder teilweise reproduziert werden. Das Logo "Aprimatic" ist ein eingetragenes Warenzeichen der Aprimatic S. p. A.

OBJETO DEL MANUAL

- Este manual ha sido redactado por el constructor y forma parte integrante del producto. El mismo contiene todas las informaciones necesarias para:
- El mismo contiene todas las informaciones necesarias para: la correcta sensibilización de los instaladores hacia los problemas de la seguridad la correcta instalación del dispositivo el conocimiento en profundidad de su funcionamiento y de sus límites el correcto uso en condiciones de seguridad La constante observación de las indicaciones suministradas en este manual, garantiza la seguridad del hombre,

- LBT0063 La constante observación de las indicaciones suministradas en este interiada, garantiza la seguindad dei nómbre, la economía del ejercicio y una mayor duración de funcionamiento del producto. Con el fin de evitar maniobras equivocadas con riesgo de accidente, es importante leer atentamente este manual, respetando escrupulosamente las informaciones suministradas. Las instrucciones, los dibios, las fotografías y la documentación que contiene este manual son propiedad de APRIMATIC S.p.a. y no pueden ser reproducidas en ninguna manera, ni integral ni parcialmente. El logotipo "Aprimatic" es una marca registrada de Aprimatic S. p. A.
- sod.

Istruzioni di installazione meccanica Uso e Manutenzione

Mechanical installation, Use and Maintenance instructions

Notice d'installation mécanique, d'Utilisation et d'Entretien

Anleitung für die mechanische Installation, Gebrauch und Wartung

Instrucciones para la instalación mecánica, el uso y el mantenimiento



INDEX

English

| SA | SAFETY STANDARDS AND INSTALLER OBLIGATIONS | | |
|----|--|----|--|
| NC | DTES FOR USERS | 13 | |
| TE | RMINOLOGY AND SYMBOLS USED IN THIS MANUAL | 13 | |
| 1. | Product technical features | 14 | |
| | Destined use and Working range Residual risks Technical data Overall dimensions | | |
| 2. | Preliminary operations | | |
| | 2.1 Supply inspection2.2 Preliminary checks: gate structure; guides; rails and sliding wheels | | |
| 3. | Installation | 16 | |
| | 3.1 Fixing the operator with the foundation kit | | |
| 4. | Notes for users | 21 | |
| | 4.1 Emergency manouvre (release) | | |
| 5. | Notes for maintenance technicians | 21 | |

5.1 Troubleshooting



SAFETY STANDARDS AND INSTALLER OBLIGATIONS

Installers must proceed as follows to conform with safety standards:

- wear protective clothing (accident-prevention footwear, goggles, gloves and helmet);
- do NOT wear clothing or jewellery that may become trapped (ties, bracelets, necklaces, etc.).

Amotorised gate is a machine and as such must be installed in accordance with health and safety standards and legislation. Before installation a risk analysis for the site must be performed by professionally qualified personnel in accordance with current legislation for motorised gates: Rules EN 12453 and EN 12445. In countries outside the EU refer to national regulations and legislation as well as the standards specified.

- Only professionally qualified personnel should install the product.
- Installation, electrical connections and settings must conform with current legislation.
- Carefully read the instruction manual before installation.
- Incorrect installation may be a source of hazards.
- Packaging must be disposed of in accordance with current legislation. Do NOT litter the environment.
- Check that the product and packaging are undamaged before starting installation.
- Do NOT install the product in areas where there is a risk of explosion. Gas, powders and flammable fumes represent a health hazard.
- Check that all safety measures are taken and that people are protected from areas posing a risk of crushing, cutting, trapping and any other hazard, in accordance with current legislation for motorised gates.
- The installation area must be cordoned off to prevent access by unauthorised personnel.
- Protection devices must be installed following risk analysis of the site. Check that the protection devices are marked and that they function in accordance with current legislation.
- The data required by applicable legislation must be clearly visible on the installation.

• Check that the mains power available is compatible with the data on the identification plate before connecting the operator to the mains power supply.

A suitable differential overload switch must be installed upstream of the operator.

- The installer must provide the user with all the information need to operate the device with particular attention given to manual operation in the event of an emergency and any residual risks.

WARNINGS FOR THE USER

• The instructions and warnings given below are a vital and integral part of the product. The instructions and warnings must be given to the user and then read carefully because they include important warnings for use and maintenance. The instructions must be kept and given to all future users.

- The operator must be used exclusively for the purpose for which it is designed. All improper use is forbidden and hazardous.
- Keep away from moving mechanical parts. Keep away from the operating range of the device during operation. Do not try to obstruct the movement of the device as such action may be hazardous.
- Keep children away from the operating range of the device at all times.
- Keep remote control and other control units in a safe place to prevent use by children or unauthorised people.
- In the event of any faults disconnect the operator from the mains power supply using the main switch. Do not try to repair the main unit. Contact the installer or other specialist assistance centre. Failure to follow these instructions may result in hazardous situations.
- All maintenance, including cleaning, must be performed by qualified personnel.
- Follow the manufacturer's instructions and refer to specialist personnel to perform routine maintenance, particularly verification of correct functioning of protection devices, to ensure correct and efficient functioning of the operator.
- All repairs and maintenance must be recorded on the maintenance record and then made available to the user.

TERMINOLOGY AND SYMBOLS USED IN THIS MANUAL

• **INSTALLATION AREA** the area required to perform installation in which the presence of persons is hazardous for the persons themselves (Appendix I, 1.1.1 Directive 89/392/EEC);

- EXPOSED PERSON any person located in full or in part in a hazardous area (Appendix I, 1.1.1 Directive 89/392/EEC);
- **INSTALLER** person responsible for installation, operation, adjustment, maintenance, cleaning, repair and transporting of the device (Appendix I, 1.1.1 Directive 89/392/EEC);
- **RESIDUAL HAZARD** risks which cannot be eliminated or sufficiently reduced as part of the design process.

Warning This symbol is used to mark information, instructions and procedures which if ignored could lead to death and serious injury and which could create a long-term health and environmental hazard.

Caution This symbol is used to mark information, instructions and procedures which if ignored can cause serious damage to the machine or to the product.

Information The symbol is used to mark important information which if ignored could void your warranty.



1. PRODUCT TECHNICAL FEATURES

1.1 Destined use and Working range

ONDA624 operator is designed to automate the movement of max. 600 Kg sliding gates for residential-use, or of max. 400 kg for condominium-use.

Any other use whatsoever is not authorised by Aprimatic.



Caution

It is forbidden to use the product improperly or for different aims than those intended. It is forbidden to tamper with or modify the product in any way whatsoever. The product must only be installed with APRIMATIC accessories.



English

Warning

Take care when the gate is opening as there is a risk of injury of hands or other parts of the body in the operating area of the operator gear.



The operator cannot be considered a supporting part or a safety device of the gate; the gate must be provided with adequate support systems and safety device.

1.3 Technical data



The maximum weight of the gate is only a partial parameter for determining the limits to use, as gate sliding MUST also be taken into account.

| Tab. Technical data | | | |
|--|-------------------|--|--|
| Single-phase power supply | 230V 50Hz ± 6% | | |
| Max absorbed power | 80W | | |
| Max accessories current supply | 200 mA | | |
| Operating temperature | -25 / +55 °C | | |
| MAX WEIGHT OF GATE Gearmotor with pinion Z 12 | 600 Kg | | |
| RATED THRUST FORCE Gearmotor with pinion Z 12 | 650 N | | |
| RATED WING SPEED Gearmotor with pinion Z 12 | 10 m/min | | |
| Degree of protection | IP 44 | | |
| Electric motor | 24 V DC | | |
| Number of daily cycles | Max. 100 | | |





1.4 Overall dimensions

Warning

During the inspection in-situ the installer must ensure there is space enough all around the gate panel sufficient for the overall dimensions indicated in Fig.3.



| Pos. | Description | Q.ty |
|------|---------------------------------|-------|
| 1 | Operator | 1 |
| 2 | Foundation plate | 1 |
| 3 | Log bolts + nuts + washer | 4+8+4 |
| 4 | Release key | 2 |
| 5 | Threaded block + screw + washer | 4+4+4 |
| 6 | Limit switch plate + screws | 2 + 4 |

2. PRELIMINARY OPERATIONS

2.1 Supply inspection

Ensure that the package contains all the components listed in Fig.5 and check for damage. Before installing the operator, make sure the model acronym printed on the packaging corresponds to the one affixed on the gear motor (Fig.4).

2.2 Preliminary checks: gate structure;

guides; rails and sliding wheels

Effective installation requires that the gate and its mechanical features comply with the construction and functional characteristics of safety and sliding performance.

For this purpose it is necessary to carry out the inspections indicated below and all apposite interventions.

Inspection of the gate structure The gate structure must be:

 rigid, straight and in good condition, without poorly fixed or partially detached parts

• without automatic locking devices (remove any automatic locking devices)

Inspection of lower rail

The lower rail of the opening wing must be:

• straight, horizontal (use a spirit level) and in good condition • equipped with a LIMIT STOP of the opening wing (**Fig.6**) to prevent the gate from slipping out of the rail and consequently A SERIOUS RISK OF OVERTURNING.

Choosing the wheels

The wheels must be:

suitable for the type of rail profile used: with round or "V" section (Fig.7)

• with a diameter at least 120 mm and dimensions suitable for the lower rail profile

• in good condition and suitable for the gate weight

• MAX TWO; positioned in the vicinity of the gate ends If these requirements are not fully met, wheels HAVE TO BE REPLACED.

Checking the upper guides

The upper guides must be:

• at least 2, flush with the gate panel

• they must prevent the gate from oscillating during operation

• they shall produce no friction during motion.

Some installation examples are shown in Fig.8.







The gate structure must comply with current safety rules, especially at points where there is a danger of crushing or shearing.

The gate MUST be easily moved by hand so that it can be opened in the event of manual release.







3. FITTING THE OPERATOR

Two methods for fixing the operator to the ground: **A-** by means of the foundation slab with 4 anchor log bolts, sunk in cement (the foundation kit). or:

B- directly fixed to the terrain using screws or chemical anchors. This method ONLY can be used if the area is sufficiently firm and flat.



Other assembly methods where the motor base is not horizontal are forbidden by the manufacturer.

The operator must be positioned with regard to the position of the closed gate (**Fig.9**).

Engli

3.1 Fixing with the foundation kit

Warning

The support base for the foundations must be constructed above the level of the surrounding ground level; if necessary raise the level a few centimetres.

In very snowy zones or areas subject to flooding we recommend positioning the plate 10-12 cm above the ground surface.



It is essential that the foundation works be carried out perfectly and that the plate be correctly positioned with respect to the wing.



Leave the correct distance between the edge of the slab and the gate surface (Fig.10).

- Excavate a pit according to the dimensions given in $\ensuremath{\textit{Fig.10}}.$

• Fill the pit with good-quality cement.

• Assemble the plate and position it with the log bolts into the cement pit.



Check the horizontal position of the plate with a level.









• Release the operator (Fig.12).

• Loosen the fixing screws of the protective casing of the operator and remove the casing (Fig.13).

• Position the operator on the fixing slab and anchor in place using the supplied screws and washers (Fig.14-Ref.A).

- Adjust the height with respect to the ground.
- Tighten the screws using an Allen wrench.

3.2 Fixing with screw anchors

Warning

This method for fixing is allowed only if an horizontal area of good firm cement has already been prepared where the operator is to be fixed.



The operator must be well aligned to the sliding gate and at a correct distance from the resting surface of the rack (Fig.15).

Use all the fixing points (4 holes) to ensure that the operator is firmly anchored to the terrain.

Use SCREWANCHORS FOR COMPACT MASONRY (Fischer S 10 RS 100 screw anchors, or equivalent).

Use a pencil to mark the position of the holes on the anchoring surface, using the foundation slab as a template (Fig.15).
Make holes for the screw anchors up to aprox 120 mm deep (Fig.16) (placing the operator in a sheltered place away from dust).

• Position the operator on the holes, insert the screw anchors (**Fig.17-Ref.A**) and tighten slightly.

ATTENTION: in order to insert the 4 screw anchors, it may be necessary removing the power transformer (Fig.17-Ref.B) by tightening the relevant fixin screws. Replace the power transformer at the end of operator fixing.

• Check the distance between the operator and the gate (**Fig.15**) before fully tightening the anchor screws.













3.3 Fixing the bar rack

The rack for the **ONDA 624** gearmotor is a moulded thermoplastic material supplied by **Aprimatic**. The rack has a steel core and can move gates of up to 500 kg. It can be easily mounted without the need for any soldering or welding.

When the wing is more then 500 kg use the steel rack. Consult the Aprimatic Price List/Catalogue.

If the lower edge of the gate is too low to fit the rack, it is necessary to create a base support. **Fig.18** shows an example of a base created with a section bar.



Eng

Assembly must be carried out in accordance with the following criteria to ensure smooth operations and the long working life of the automated gate:

The different components of the rack must be well aligned with each other.

The pitch between the teeth must be kept constant in the joints.

The rack height must be respected (Fig.19) and adjusted to prevent the weight of the gate falling on the gearmotor.



To prevent gate from weighing on the operator pinion, the whole rack must be raised by 1.5 mm using the row of slots for the different rack components; only after this can the fixing screws be fully tightened. NEVER LUBRICATE THE RACK.

3.3.1 Plastic rack with a steel core

The plastic rack is normally fixed to the gate using the supplied screw (4 tapping screws for each metre length of bar rack).

We recommend using these screws to prepare holes in function of the thickness and material of the resting surface, according to the following table:

| Thickness | Material | |
|-----------|-------------|-----------|
| тт | Steel/Brass | Aluminium |
| 1,5 ± 1,9 | Ø 5,2 | Ø 5,1 |
| 1,9 ± 2,7 | Ø 5,3 | Ø 5,2 |
| 2,7 ± 3,4 | Ø 5,8 | Ø 5,3 |
| 3,4 ± 4,8 | Ø 6 | Ø 5,4 |
| 4,8 ± 5 | Ø6 | Ø 5,6 |



Ensure that the screws are fixed to strong points when using wooden wings.

Fixing:

• Reset the initial part of the rack on the pinion of the gearmotor, place a level above the bar rack and, when this indicates a horizontal position, use a pencil to mark the position of the slots for making the holes (**Fig.20**).

• Remove the rack and make preparatory holes to the diameter given in the table (Fig. 21).

• Replace the bar and fix it with the special tapping screws (Fig.22) supplied, being careful not to completely tighten them and constantly checking the horizontal position of the bar with a level.



2=Aprimatic

Proceed by fixing the other components of the rack as

ZAprimatic

shown (**Fig.23**).

Warning

Always check with a template (Fig.24 A) that the pitch between the bar linkages is kept even.

If the fit is imperfect and it is impossible to maintain the correct pitch, then you need to adjust them.

Proceed as given in the previous points.

3.3.2 Galvanized steel rack

Fitting:

Fixing is made using the threaded bolts welded on the gate mount. It is recommended to weld the bolts along their entire circumference.



DO NOT weld the rack sections directly on the gate panel and DO NOT weld adjacent parts one to the other or the free space between them (any following adjustments would be impossible).

Keep the negative lead of the welder CLEAR OF the gear motor.

NEVER WELD WHEN THE GEARED-MOTOR IS CONNECTED TO THE MAINS.

ALWAYS PROTECT THE WELDINGS WITH A ZINC-BASED RUST-PREVENTER SPRAY.

· Throw the gate open.

• Fix the spacers to the steering rack with screws and washers (Fig.25) making sure to drive them right in the middle of the slot.

• Position the initial section of the steering rack on to the pinion of the gear motor, move the spacers in contact with the gate and align the first slot with the vertical axis of the pinion, then fix the spacer to the gate with a welding spot (**Fig.26**).

• Unlock the gear motor (see paragraph) and move the gate by hand until the second spacer is aligned with the vertical axis of the pinion, then fix the spacer to the gate with a second welding spot (Fig.27).

• Move the gate beyond the first section of the steering rack.

• Fit a 20 cm-long section (**Fig.28**) to the steering rack. Near the second section of rack to the first one by bringing it in contact with the piece used as ruler. Poition the final part of the second rack section onto the gear motor pinion by moving the gate by hand.

• Position the spacers of the second rack section onto the gate and fix them with two welding spots.

• Repeat the steps above with all elements of the steering rack you necessitate, then weld in position all spacers on the gate: weld them along their entire circumference.







3.4 Fixing the limit switch plates

The actuator has an electromechanical limit switch with a spring rod. The limit switch is tripped by two metal plates that must be fitted on the rack in such a way as to engage the limit switch rod when the gate is near the fully open and fully closed positions.



To avoid crushing risk, do not use the mechanical gate stops as the gate stroke limits.

Always leave the safety margin required by current Safety Regulations between the limit switch plates and the mechanical gate fully open and gate fully closed stops (Fig.29).

English

- <u>Unlock</u> the operator (see the relevant **Paragraph**).
- Move the gate to the <u>CLOSE</u> position (1 or 2 cm from the mechanical stop). Place the first plate in such a way that it engages the operator limit switch (**Fig.30**), then fasten it in the slots in the rack using the grub screws (**Fig.31**).

• Move the gate to the required <u>OPEN</u> position (leaving it clear of the mechanical stop by the required safety margin). Place the second plate in such a way that it engages the limit switch, then fasten it in the slots in the rack using the relevant grub screws.

• Move the gate to an <u>intermediate position</u> (neither limit switch plate must be engaged) and lock the actuator. Move the gate a little in either direction until you hear the sound of mechanical parts engaging.











4. NOTES FOR USERS

4.1 Emergency manouvre (release)

In the event of a blackout, release the operator by turning the key clockwise, open the lever (**Fig.32**) and manually open the gate. Re-lock the operator, at the end of the operation, then slide the gate slightly in one direction, until you hear a coupling click.

Caution At the end of a gate released stage, in which manually opening or closing is possible with the unit powered, it is necessary to move the gate back to the closed position before using the unit again (Step-by-Step START, remote control, etc.). If not, the operator may not function correctly. At regular intervals, we recommend carrying out regular checks to ensure that the operator is running smoothly. Do this at least once every 12 months.



5. NOTES FOR MAINTENANCE TECHNICIANS

English

Warning Maintenance can only be carried out by specialised personnel. Before servicing the operator use the differential switch to disconnect the power supply.

For correct maintenance regularly carry out the following checks as given in the maintenance manual issued by the installer. • Inspect the general condition of the gate structure and THE UPPER GUIDES.

- Inspect the condition of wheels, guide, couplings and limit stops.
- Inspect the condition of the safety device (photocells, ribs, ...) and performance of the electronic clutch.
- · Check that the electric system and differential switch work correctly.
- Check that the input of the Stop push-button is connected to a NC contact and THAT IT IS WORKING CORRECTLY.

5.1 Troubleshooting

| TYPE OF FAULT | PROBABLE CAUSES | SOLUTIONS |
|---|---|--|
| | No power. | Restore voltage. |
| | The circuit is not correctly connected. | Check that the equipment is correctly connected, that it has not lost connection. The unused NC contact have to be jumpered. |
| | The radio-controls are not working. | Check that the radio-control battery is charged. |
| The gate does not open when | | Check that the receiver is working. |
| commanded and the motor | The equipment is not working | Check the fuse F1. |
| does not start-up. | | Check the equipment logic. |
| | The limit switch is not correctly connected or | Check that the limit switch is connected and working. |
| | is faulty. | Check that input of the STOP push-button is connected to a NC contact. |
| | The release is open. | Shut the manual release. |
| command the motor | Connection between motor and limit switch is inverted; the motor is pushing the wing in the opposite direction. | Restore the correct limit switch connection. |
| does not move. | Adjust the sensitivity of the electronic clutch. | Set torque adjustment (see enclosed manual). |
| The gate opens in jerks, is | The rack is resting on the pinion or the bar pieces are not evenly spaced. | Check the rack again and reset it to the correct horizontal position. |
| noisy or stops naitway. | The guide has steps or the gate resists movement. | Check the guide and wheels and improve sliding. |
| | The power of the gearmotor is insufficient for the gate specifications. | Use a more powerful gearmotor (see Par. TECHNICAL DATA). |
| On giving a closing command, | The photocells are faulty. | Check photocells and relevant connections. |
| the gate does not close. | The motor polarity is incorrect. | Reverse the jumper-lead positions (Reversing Motor). |
| The key release offers strong resistance or is blocked. On giving | The gate comes to a halt against the limit stop | Review the position of the plates and braking times. |
| the opening command the motor starts-up but the gate does not move. | causing on load blocking of the gears. | Check correct working of limit stop. |
| The gearmotor operates slowly. | The gearmotor is in self-learning mode. | Replace electronic equipment if the manual speed does not restart properly. |



SPACE RESERVED FOR INSTALLER PLEASE GIVE A COPY OF THIS PAGE TO THE USER



Aprimatic S.p.A. via Leonardo da Vinci, 414 40059 Villa Fontana di Medicina - Bologna - Italia Telf. +39 051 6960711 - fax +39 051 6960722 info@aprimatic.com - www.aprimatic.com



Aprimatic S.p.A.

via Leonardo da Vinci, 414 40059 Villa Fontana di Medicina - Bologna - Italy tel. +39 051 6960711 - fax +39 051 6960722 *info@aprimatic.com - www.aprimatic.com*