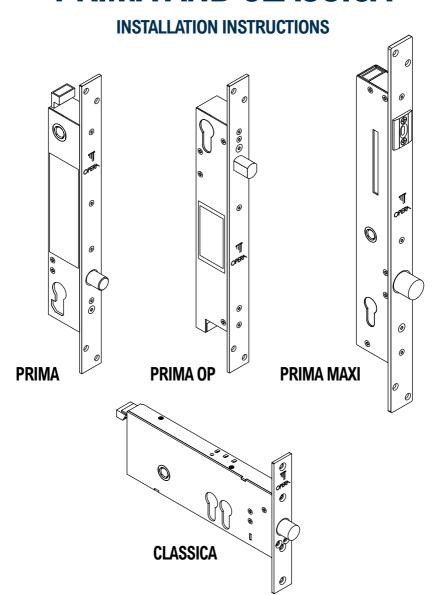


# **PRIMA AND CLASSICA**





Please read the following instructions carefully.

The warnings in this manual must be observed in conjunction with the USER MANUAL. Read and keep this manual in its entirety for the life of the product, including proof of purchase and warranty (USER MANUAL).

Use only supplied or recommended products.

Thoroughly clean the work area of dust and shavings before installation. Do not expose the product to water, weather, high temperatures or strong electromagnetic fields. Do not install in explosive environments or in the presence of flammable vapours: safety hazard.

Entrust the installation of the electrical part to experienced personnel.

Do not make modifications or repair to the electrical or electronic components.

Check for proper grounding when connecting to the power supply.

Disposal of packaging in the appropriate containers is recommended.

For further information:

www.opera-italy.com

Tel: +39 059 451708

e-mail: info@opera-access.it

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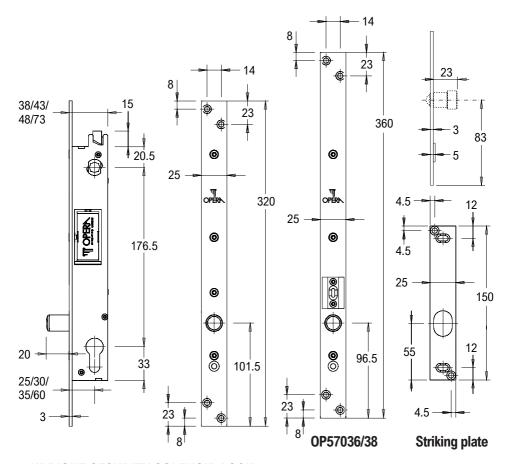
#### TECHNICAL SPECIFICATIONS AND DIMENSIONS:

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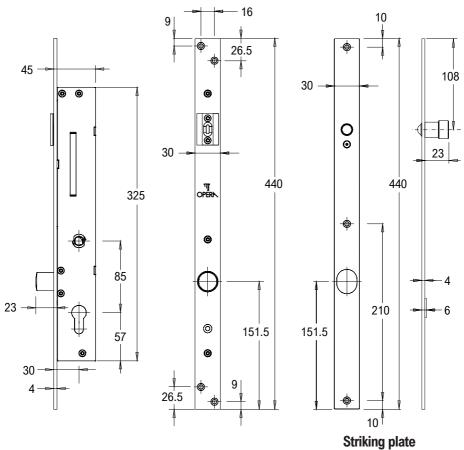
## **TECHNICAL SPECIFICATIONS AND DIMENSIONS - PRIMA series**



## **UPRIGHT SECURITY SOLENOID LOCK**

- > Stainless steel face plate and striking plate, hardened steel deadbolt/spring latch
- > Versions with fail-safe or fail-secure deadbolt/spring latch
- > Power supply: 12 ÷ 24 Vdc, peak current 3 A, holding current 130 ÷ 230 mA
- > Ready for interlocking between 2 or more doors
- > Opto-electronic control of deadbolt / spring latch position
- > Electronic control (can be disabled) of reclosing timings
- > Anti-rebound alignment ball (optional)

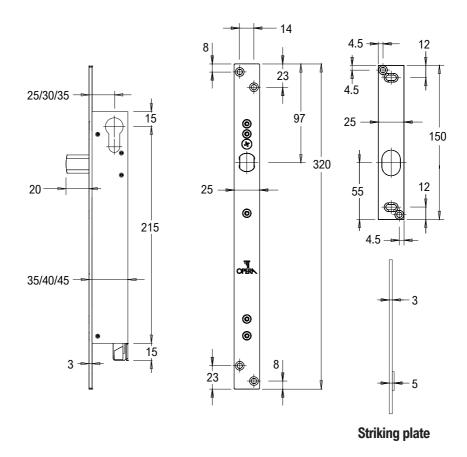
### **TECHNICAL SPECIFICATIONS AND DIMENSIONS - PRIMA MAXI series**



## **UPRIGHT SECURITY SOLENOID LOCK**

- > Stainless steel face plate and striking plate, hardened steel deadbolt
- > Versions with fail-safe or fail-secure deadbolt
- > Power supply: 12  $\div$  24 Vdc, peak current 3 A, holding current 130  $\div$  230 mA
- > Ready for interlocking between 2 or more doors
- > Opto-electronic control of deadbolt position
- > Electronic control (can be disabled) of reclosing timings
- > Anti-rebound alignment ball

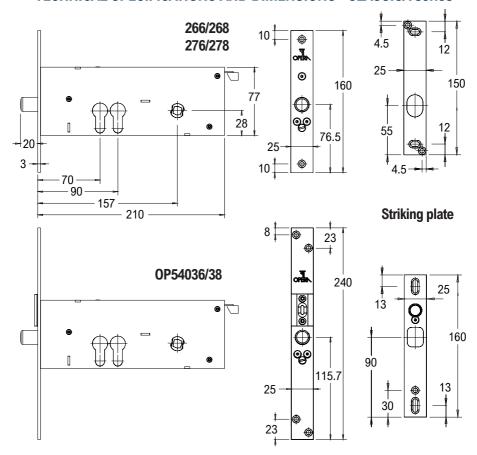
## **TECHNICAL SPECIFICATIONS AND DIMENSIONS - PRIMA OP series**



#### **UPRIGHT SECURITY SOLENOID LOCK**

- > Stainless steel face plate and striking plate, hardened steel deadbolt/spring latch
- > Versions with fail-safe or fail-secure deadbolt/spring latch
- > Power supply: 12 ÷ 24 Vdc, peak current 3 A, holding current 130 ÷ 230 mA
- > Ready for interlocking between 2 or more doors
- > Opto-electronic control of deadbolt / spring latch position
- > Electronic control (can be disabled) of reclosing timings

## **TECHNICAL SPECIFICATIONS AND DIMENSIONS - CLASSICA series**



#### HORIZONTAL SECURITY SOLENOID LOCK

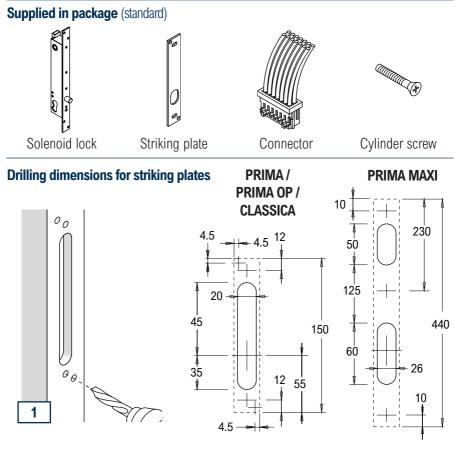
- > Stainless steel face plate and striking plate, hardened steel deadbolt/spring latch
- > Versions with fail-safe or fail-secure deadbolt/spring latch
- > Power supply: 12 ÷ 24 Vdc, peak current 3 A, holding current 130 ÷ 230 mA
- > Ready for interlocking between 2 or more doors
- > Opto-electronic control of deadbolt / spring latch position
- > Electronic control (can be disabled) of reclosing timings
- > Anti-rebound alignment ball (optional)

#### INSTALLATION

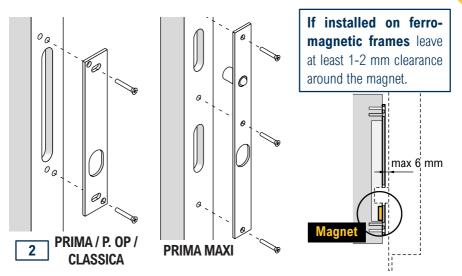
**CAUTION**: do not file or drill holes in the fixture with the solenoid bolt installed. Do not use the solenoid bolt as a drilling template. Risk of damage or jamming of the internal mechanics due to dust and/or shavings.

Do not weld or solder the striking plate to the door frame.

**Do not use non-direct connection systems** (eg. spring contacts) to pass the connecting wires through: **use a cable cover** (e.g. item 08600).



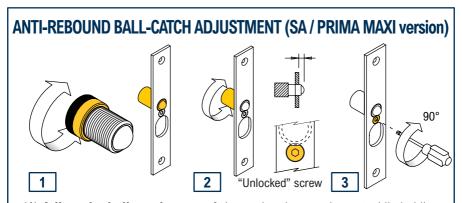
(1) Drill holes for inserting the striking plate according to the diagram shown here. The striking plate is essential for the operation of the solenoid lock.



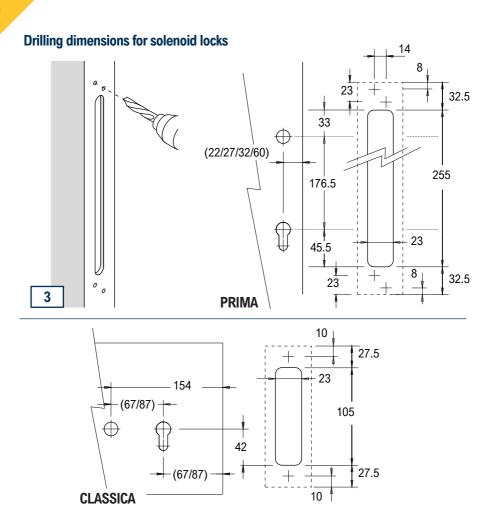
(2) Install the striking plate using appropriate screws (not supplied).

Pay attention to the orientation of the magnet: it must be installed wall side and below the deadbolt axis. otherwise the solenoid bolt will not work.

Continues...



- (1) Adjust the ball-catch strength by turning the rear ring nut while holding the threaded portion steady until the optimum holding strength is reached.
- (2) Checking that the screw on the striking plate is in the "unlocked" position, adjust the ball-catch protrusion by turning the rear ring nut relative to the striking plate. (3) When the adjustement is finished, lock the thread by turning the screw on the striking plate 90° clockwise.

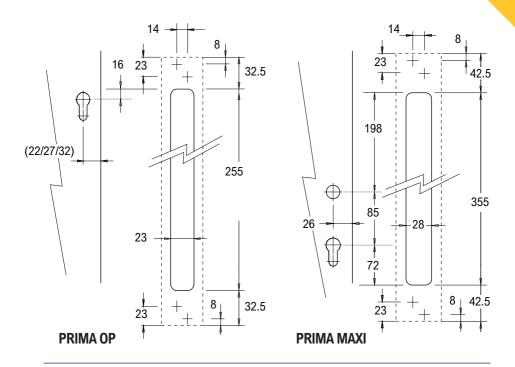


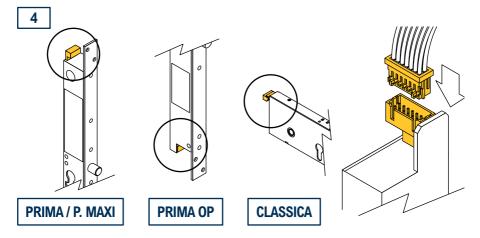
(3) **Drill holes for the installation of the solenoid bolt** according to the diagram corresponding to the product to be installed.

Thoroughly clean the inside of the casing from chips and dirt.

**Installation on door frame:** if the handle function is not necessary, the solenoid bolt can be installed on the door frame. The use of a cable cover for connecting wires is not required in this case.

In case the handle is required, the solenoid bolt must be mounted on the door, using an appropriate cable cover (e.g. item 08600).

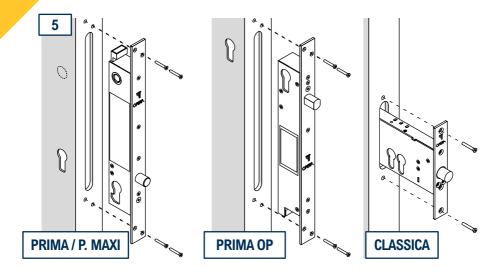




(4) *Gently* insert the quick plug-in connector into the receiving connector located on the solenoid lock at the indicated position.

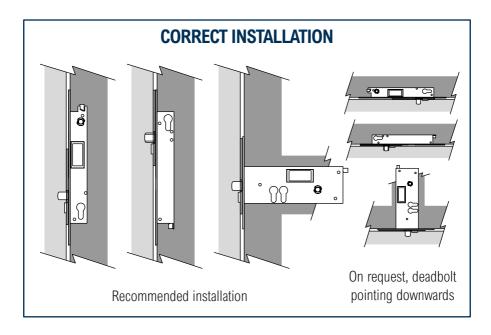
PAY ATTENTION TO THE DIRECTION OF INSERTION.

Continues...



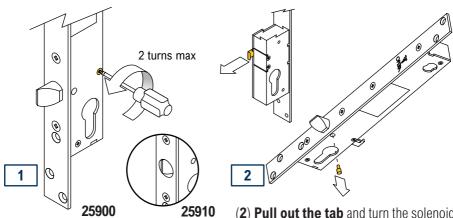
(5) **Install the solenoid bolt** using appropriate screws (not supplied) **paying attention to proper alignment** with the hole for the cylinder.

If the solenoid lock is set up for the installation of a tamper defender, make sure it is installed correctly.



## SPRING LATCH REVERSIBILITY (ITEM 25900 / 25910 ONLY)

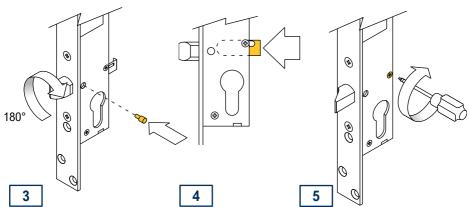
**Reversibility** supported only by items 25900 and 25910 with 25-30-35 mm backsets. The 60 mm backset version and the Prima OP series shall necessairily be ordered either in the left or right hand version.



(1) Loosen the retaining screw (Torx M3x5) with a screwdriver.

(2) Pull out the tab and turn the solenoid bolt upside down to extract the pin.

**Item 25900:** press lightly on the spring latch to ease the pin out.



- (3) Turn the spring latch 180° and reinsert the guide pin into the hole.
- (4) Close the tab, then (5) tighten the retaining screw.

#### TIMING ADJUSTMENT

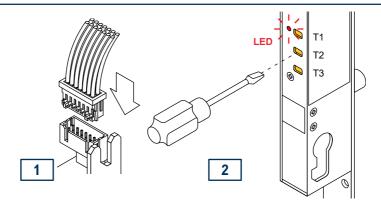
#### Perform this operation with the solenoid lock in hands (not mounted)!

Simulate the opening or closing of the door with the disassembled striking plate magnet. To simulate the door closing, bring the striking plate close to the solenoid lock, aligning the hole with the bolt and with the magnet facing outwards.



NOTE: timing adjustment not available on items 25910/25918

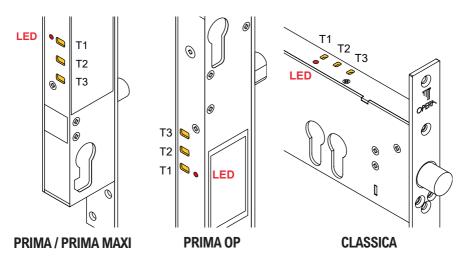
Timings are factory-set according to the *Default* settings (see table in facing page).



- (1) Connect the electric lock to the power supply.
- (2) Gently insert a small slotted screwdriver into holes T1, T2 or T3, located on the back of the lock, pressing the button positioned inside. Hold down the button until the LED lights up steadily (1 sec), after which the LED makes a double flash at each timing interval. Count the number of double flashes and release the button at the desired timing interval. The LED will flash again to confirm the number of seconds set.

**In order to set the timing to "0"** remove the screwdriver within 1 sec of the LED lighting up. The LED will subsequently light up steadily for 1 sec.

#### **BUTTONS**



T1 : deadbolt closure timing upon approach of the door.

**T2**: deadbolt closure timing if the door is not opened.

 ${\bf T3}$  : timing of  $\it prolonged\ door\ opening\ \it alarm\ (only\ on\ versions$ 

246-248-266-268).

With T1 and T2 set to 0 sec: internal timings disabled, the lock can be operated by means of external control systems by supplying or removing power.

The function of the magnetic door sensor is also disabled.

With T3 set to 0 sec: the alarm feature for prolonged opening is disabled.

To check the current timing: briefly press the concerned button.

Button	Range	Minimum range	Default setting
T1	0 to 5 sec.	±1 sec.	1 sec.
T2	0 to 60 sec.	± 5 sec.	5 sec.
Т3	0 to 120 sec.	±10 sec.	10 sec.

# **TABLE OF FUNCTIONS**

Wire colour	Function	Description
Black Black	Power supply (non-polarized)	Voltage: 12 ÷ 24 Vdc Peak current: 3 A Current (holding): 300 mA
		Current (notding) : 500 mA
Orange (green band)	Common contact	Voltage-free microswitch for remote
Red (green band)	Contact (N.O.)	signalling of deadbolt position.  See NOTES.
Brown (green band)	Contact (N.C.)	OGE HOILO.
Green / black	Signal ground (GND)	GND reference of each control.  Not the - of power supply.
Red / black	Opening	<b>Impulsive</b> command for deadbolt release, from clean N.O. contact.
Brown	Door status	Door position signalling / alternate magnetic sensor status. <b>See NOTES</b>
Yellow / black	Interlock	Input / output of interlock connection. See INTERLOCKING DIAGRAM.
Blue	Alarm / Failure (item 246 - 248 only)	Open Collector output for alarm signalling. See NOTES.
Green	RESET (item 246 - 248 only)	N.O. <b>impulsive</b> contact to be connected to GND for alarm reset.
Orange	Emergency (item 246 - 248 only)	N.O. <b>impulsive</b> contact to be connected to GND for the immediate unlocking of the door.
Yellow	Lockout (item 246 - 248 only)	N.O. contact to be <b>steadily</b> connected to GND in order to disable the opening/closing of the deadlock (excluding <i>Emergency</i> ).

#### **NOTES**

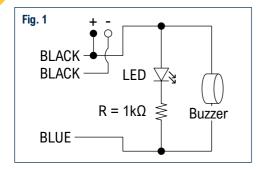
**Green-banded wire connections** (Brown, Red and Orange) shall be used **only if local or remote signalling of deadbolt status is required** (e.g. to indicator lamp item 55010-55030).

**The Alarm / Failure connection** (Blue) is an *open collector* output that can be connected to low-consumption loads (max 50 mA, **fig. 1**) or to Interface Relays for alarm signalling (**fig. 2**). Connected to ground when:

- the alarm is triggered by the Emergency command. Manual reset after minimum 10 sec via the RESET command.
- the door remains open beyond the delay set by the Prolonged door opening feature (if the timing is not set to zero). Automatic reset with the closing of the door or manual reset if the RESET command is triggered.
- an obstruction (failure state) is detected when the deadbolt closes.
   Manual reset by triggering the RESET command.
- the opening of both interlock-connected doors is detected.
   Automatic reset with the closing of either door.
- in the **presence of closed deadbolt and open door.** Resettable at the end of the anomaly.

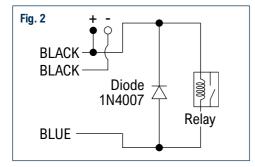
The *Door status* connection (Brown) can be either used for the **remote** signalling of door status or to connect an alternative magnetic sensor in place of the built-in one, eliminating the magnet installed on the striking plate (fig. 3). Caution: do not connect to a direct relay. In order to signal remotely the door status, use an interface circuit such as item 05259 shown in fig. 4

CAUTION : do not connect directly the <i>Alarm / failure</i> output to loads greater than 50 mA. Risk of damage to the electronic components.	

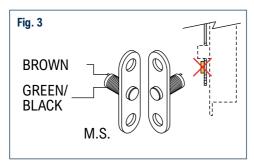


**Fig.1:** Connection of the *Alarm / Failure* output directly to low-power loads, such as LEDs or Buzzers.

Do not connect to loads greater than 50 mA directly. (Item 246 - 248 only).

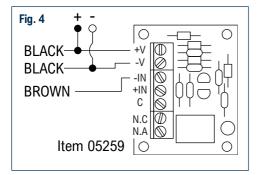


**Fig.2:** Connection of the *Alarm / Failure* output to an interface relay in order to signal the alarm status by devices with larger loads (e.g. 230V-powered alarm devices). **(Item 246 - 248 only).** 



**Fig.3:** Connection to an alternative magnetic sensor (**M.S.**)

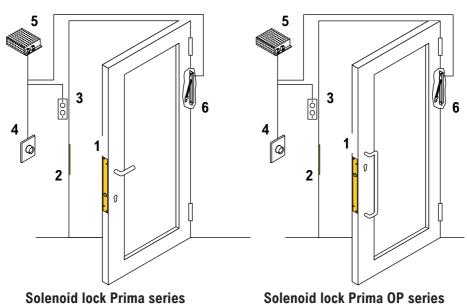
Remove the built-in magnet, installed on the back of the striking plate.



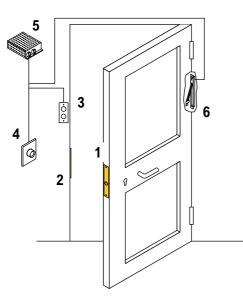
**Fig.4:** Remote signalling of door status using our interface circuit item 05259.

Do not connect the brown wire to a direct relay, risk of damage to the magnetic sensor.

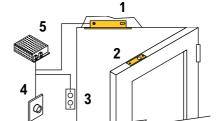
## **APPLICATION EXAMPLES**



Solenoid lock Prima series



**Solenoid lock Classica series** 



Installation on door frame (read the warnings on pag. 10).

## Legend

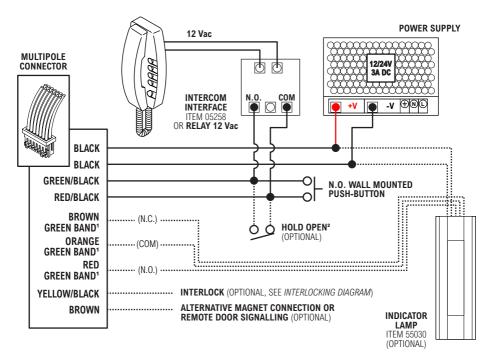
- 1 Security solenoid lock
- **2** Striking plate
- 3 Indicator lamp
- 4 Opening button
- **5** Power supply
- 6 Concealed cable cover

#### SAMPLE CONNECTION FOR APARTMENT BUILDING DOOR

CAUTION: for POWER CONNECTIONS (black wires) do not use cables longer or with a cross-section smaller than:

Minimum cross-section	Maximum length
0,75 mm <sup>2</sup>	Up to 5 m
1,5 mm²	5 to 10 m
2,5 mm²	10 to 20 m

For other electrical connections do not use wires with cross-section smaller than 0,22 mm<sup>2</sup>. Risk of damage and/or malfunction.

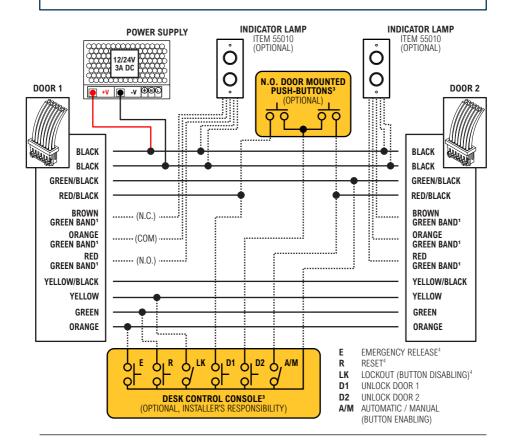


**Please note:** dotted connections are optional.

WARNING: each conductor must be carefully insulated!

#### BASIC INTERLOCKING DIAGRAM

In order to use the interlock feature (linking the opening of one lock to the closing of another) **simply connect Ground** (GND, Green/Black) **and Interlock contacts** (Yellow/Black) **to each other** of the N installed locks.



<sup>&</sup>lt;sup>1</sup> GREEN BAND contacts are to be used only if a deadbolt status signalling is required (by means of optional indicator lamp, e.g. item 55010 or item 55030).

<sup>&</sup>lt;sup>2</sup> the HOLD OPEN contact (optional) is to be used only if continuous unlocking of the deadbolt is required for prolonged periods (e.g. Timer or Key Switch).

<sup>&</sup>lt;sup>3</sup> Desk Control Console, individual push-buttons on the doors or N parallel control devices of a different kind can be installed to open the doors.

<sup>&</sup>lt;sup>4</sup> Only on item 246 - 248.

# **TROUBLESHOOTING**

Problem	Possible cause	Solution
The deadbolt does not close by shutting the door.	Striking plate	Check the correct positioning and/or alignment of the striking plate.
	Opening command	Check that the opening command does not remain active indefinitly (e.g. button always pressed, short-circuited wires).  Try disconnecting the two red/black and green/black wires of the connector.
	Power supply (Fail unlocked version)	Check that the lock is correctly powered (Vmin = 11 Vdc between the <i>black</i> wires).  Try powering the lock with a 12 V battery.
The deadbolt does not open.	Power supply	Check that the lock is correctly powered (Vmin = 11 Vdc between the <i>black</i> wires).  Check whether this remains constant while the opening command is being sent.  If it varies by more than 3 or 4 V, try replacing the power supply.
	Opening command	Check wiring, button and circuitry of the opening command. Try disconnecting the <i>red/black</i> and <i>green/black</i> wires from the connector.
	Mechanical obstructions	Check for the absence of excessive friction and/or play.

Check that the opening/closing

by dirt or non functioning.

**Contact OPERA customer care** 

opening / closing of the deadbolt while supplying power to the lock.	adjustment	timing hasn't been set to zero. If so, reset the timing (see <b>Timing Adjustment</b> ).
The deadbolt opens and closes in quick succession.	Power supply	Check that the lock is correctly powered (Vmin = 11 Vdc between the <i>black</i> wires, Imin = 3 A (peak),
The deadbolt moves with difficulty when opening and/or closing.		Imaint. = 300 mA). Check whether this remains constant while the opening command is being sent. Try replacing the power supply or powering the lock with a 12 V battery.
	Mechanical obstructions	Check for the absence of excessive friction and/or play. Check the correct positioning and/or alignment of the striking plate (6 mm max).
	Dirt	Internal optical end stops obscured

Timing

Uncommanded

In case of persistent problems and/or defective lock, contact the authorized dealer or OPERA customer care.

Tel: +39 059 451708 e-mail: info@opera-access.it

AVOID INTERVENTIONS THAT WILL VOID THE WARRANTY.

Do not file / drill / tamper with the lock or any of its parts.



# For products:

PRIMA	PRIMA OP	PRIMA MAXI	CLASSICA
24600	OP55036	24620	26600
24608	OP55038	24628	26608
24800	OP55039.1	24820	26800
24808	OP55039.2	24828	26808
25600	OP5503910.1	25620	27600
25608	OP5503910.2	25628	27608
25800		25820	27800
25808		25828	27808
25900			OP54036
25908			OP54038
25910			27900
25918			27908
OP57036			
OP57038			



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## **USER MANUAL**



Cod. 01040D20 - REV. 03/23